

Project No. 1251-100

Crude Oil Tank Farms Project, Agrood Area 30 (Module-1)



System ID

030-TE-001

**System
Description**

Integrated Voice & Data System

Sr.	Pre-Commissioning and Commissioning Dossier Index	Applicable (Yes/No)
1	Mechanical Completion Certificate (MCC)	
2	Ready for Startup Certificate (RFSU)	
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7	Piping Commissioning	
	7.01) Service Test, GLT, CLT and N2 Purging Certificates	
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Sr.	Pre-Commissioning and Commissioning Dossier Index	Applicable (Yes/No)
8	Mechanical Pre-Commissioning	
	8.01) System Mechanical Index	
	8.02) Equipment Drawings	
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11	Instrumentation Commissioning	
	11.01) Instrumentation Function Test Certificates	
	11.02) Instrumentation Supplier Check Lists & Reports	
Sr.	Pre-Commissioning and Commissioning Dossier Index	Applicable (Yes/No)
12	Electrical Pre-Commissioning	
	12.01) System Electrical Index	
	12.02) Electrical Drawings	
	12.03) Motor Datasheets	
	12.04) Electrical Cables Schedule	
	12.05) Electrical Cables Laying Certificates	
	12.06) Electrical Cables Testing Certificates	
	12.07) Electrical Cables Termination Certificates	
	12.08) FAT Reports & Certificates	
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13	Electrical Commissioning	
	13.01) Electrical -Commissioning Check Lists	
	13.02) Electrical Supplier Check Lists & Reports	
14	Red Marked-up Drawings	
	14.01) P&ID	
	14.02) Instrumentation Drawings	
	14.03) Electrical Drawings	



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CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



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1-Mechanical Completion Certificate (MCC)

SYSTEM MECHANICAL COMPLETION CERTIFICATE (MCC)

PROJECT TITLE : CRUDE OIL TANK FARM PROJECT (AGROOD AREA)

PROJECT No : 01251-100



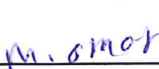
SYSTEM NAME : Integrated Voice & Data System

SYSTEM ID : 030-TE-001

THIS IS TO CERTIFY THAT:

- THE ABOVE SYSTEM HAS BEEN FABRICATED, ERECTED, INSTALLED AND TESTED TO THE REQUIREMENTS OF THE CONTRACT DRAWINGS, SPECIFICATIONS, THE APPLICABLE CODES AND STANDARDS.
- ALL PRE-COMMISSIONING RELEVANT ACTIVITIES, TESTS, INSPECTIONS AND CHECKS HAVE BEEN CARRIED OUT FOR THIS SYSTEM AND FOUND ACCEPTABLE.
- Q/C DOCUMENTATION OF THE ABOVE SYSTEM HAS BEEN AUDITED BY THE CUSTOMER SITE QUALITY CONTROL AND FOUND COMPLETED.
- ALL PUNCH LIST ITEMS CATEGORY (A) IN THIS SUBSYSTEM WERE CLEARED.
- THIS SYTEM IS MECHANICALLY COMPLETED ON THE DATE AND READY FOR COMMISSIONING (RFC) WITH THE FOLLOWING EXCEPTIONS.

EXCEPTIONS :

COMPANY	PETROJET	ENPPI	PMC
NAME	Sobhy Saleem	Mohamed Abbas	Mohamed Omar
TITLE	EPI Pc Engineer	Const. mgr.	I. Engineer
SIGNATURE			
DATE	10/11/2021		



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CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-TE-001
System Description	Integrated Voice & Data System

2- Ready for Startup Certificate (RFSU)



READY FOR START UP CERTIFICATE

PROJECT TITLE : EGPC CRUDE OIL TANK FARMS PROJECT (AGROOD-30)

PROJECT No. : 1251-100

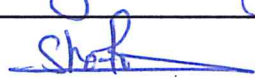
SYSTEM /AREA /PLANT : Integrated Voice & Data System

SYSTEM /AREA /PLANT No. : 030-TE-001

THIS IS TO CERTIFY THAT:

- THE MENTIONED SYSTEM /AREA /PLANT IS READY FOR START UP WHERE ALL MECHANICAL WORKS, PRECOMMISSIONING AND COMMISSIONING ACTIVITIES HAVE BEEN SUCCESSFULLY COMPLETED.
- MECHANICAL COMPLETION CERTIFICATE(S) FOR THE MENTIONED SYSTEM / AREA / PLANT HAVE BEEN SIGNED.
- ISSUANCE OF THIS READY FOR START UP CERTIFICATE(S) SHALL NOT RELIEVE CONTRACTOR(S) FROM THEIR OBLIGATIONS TO COMPLETE THE REMAINING SYSTEMS NOR FROM THEIR WARRANTY OBLIGATIONS AND OTHER PROVISIONS OF THE CONTRACT.
- THE FOLLOWING EXCEPTIONS AGREED TO BE CLEARED AFTER START UP AND WILL NOT PREVENT START UP ACTIVITIES.

EXCEPTIONS :

COMPANY	ENPPI	PPC
NAME	Ahmed El Shofie	mohamed omar
TITLE	commissioning Manager	I. engineer
SIGNATURE		M. omar
DATE	6-11-2021	7-11-2021



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CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-TE-001
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3- System Punch Lists

PROJECT TITLE : CRUDE OIL TANK FARM PROJECT (AGROOD AREA)

PROJECT NUMBER : 01251-100

DISCIPLINE: ~~process~~ Telecomm

SYSTEM NAME: Integrated Voice & Data System



SYSTEM ID: 030-TE-001

SUB-SYSTEM NAME:

SUB-SYSTEM ID:

[illegible]

CAT: CATEGORY(A,B,C) ,ACTION BY: (ENPPI,CONST.CONTRACTOR,SUPPLIER.....) , DISP: DESCIPLINE(PIP,MECH,ELECT,INST.....)

COMPANY	PTJ	ENPPI	PMC
NAME	Sobhy Seleem		moner
SIGN.			
DATE	6/1/17/21		



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System Description

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4- System Limits Marked Up P&ID



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5- System Index



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System Description

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6- Piping Pre-Commissioning



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6.01- Piping Test Packs



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System Description

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6.02- Piping Pre-commissioning Check Lists



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7- Piping Commissioning



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7.01- Service Test, GLT, CLT and N2 Purging Certificates



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7.02- Piping Commissioning Check Lists



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8- Mechanical pre-Commissioning



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System Description

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8.01- System Mechanical Index



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System Description

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8.02- Equipment Drawings



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System Description

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8.03- Equipment Datasheets



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8.04- Boxing-up Certificates



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8.05- Grouting Certificates



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8.06- Pre-Alignment Certificates



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8.07- Mechanical Pre-Commissioning Checklists



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System Description

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9- Mechanical Commissioning



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System ID	030-TE-001
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9.01- Final Alignment Certificates



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9.02- Motor Solo Run Certificates



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9.03- Mechanical Run Test (MRT) Certificates



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9.04- Mechanical Commissioning Checklists



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9.05- Mechanical Supplier Check Lists & Reports



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10- Instrumentation Pre-Commissioning



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10.01- System Instrument Index



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10.02- Instrument Data Sheets



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10.03- Instrument Cable Schedule



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10.04- System Instrumentation Wiring Diagram



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10.05- Hook-up Drawing (Mechanical & Pneumatic)



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10.06- Instruments Cables Schedule



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10.07- Instruments Cables Laying Certificates



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10.08- Instruments Cables Termination Certificates



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System ID	030-TE-001
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10.09- Instruments Cables Testing Certificates



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10.10- Instruments Calibration Certificates



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10.11- Instrument Loop Checks Certificates



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10.12- Instrumentation Pre-Commissioning Check Lists



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10.13- Instrumentation Supplier Check Lists & Reports



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11- Instrumentation Commissioning



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11.01) Instrumentation Function Test Certificates



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11.02- Instrumentation Supplier Check Lists & Reports



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12- Electrical Pre-Commissioning



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System Description	Integrated Voice & Data System

12.01- System Electrical Index

030-TE-001	Integrated Voice & Data System	Electrical	P1-CCTV-CRK-030-01	LV Cable	Checklist
030-TE-001	Integrated Voice & Data System	Electrical	P1-VD-TRK-030-01	LV Cable	Checklist
030-TE-001	Integrated Voice & Data System	Electrical	P2-CCTV-CRK-030-01	LV Cable	Checklist
030-TE-001	Integrated Voice & Data System	Electrical	P2-VD-TRK-030-01	LV Cable	Checklist
030-TE-001	Integrated Voice & Data System	Electrical	P3-CCTV-CRK-030-01	LV Cable	Checklist
030-TE-001	Integrated Voice & Data System	Electrical	P3-VD-TRK-030-01	LV Cable	Checklist
030-TE-001	Integrated Voice & Data System	Telecommunication	VD-TEL-030-01	Telecommunication Cable	Checklist
030-TE-001	Integrated Voice & Data System	Telecommunication	VD-TEL-030-02	Telecommunication Cable	Checklist
030-TE-001	Integrated Voice & Data System	Telecommunication	VD-TEL-030-03	Telecommunication Cable	Checklist

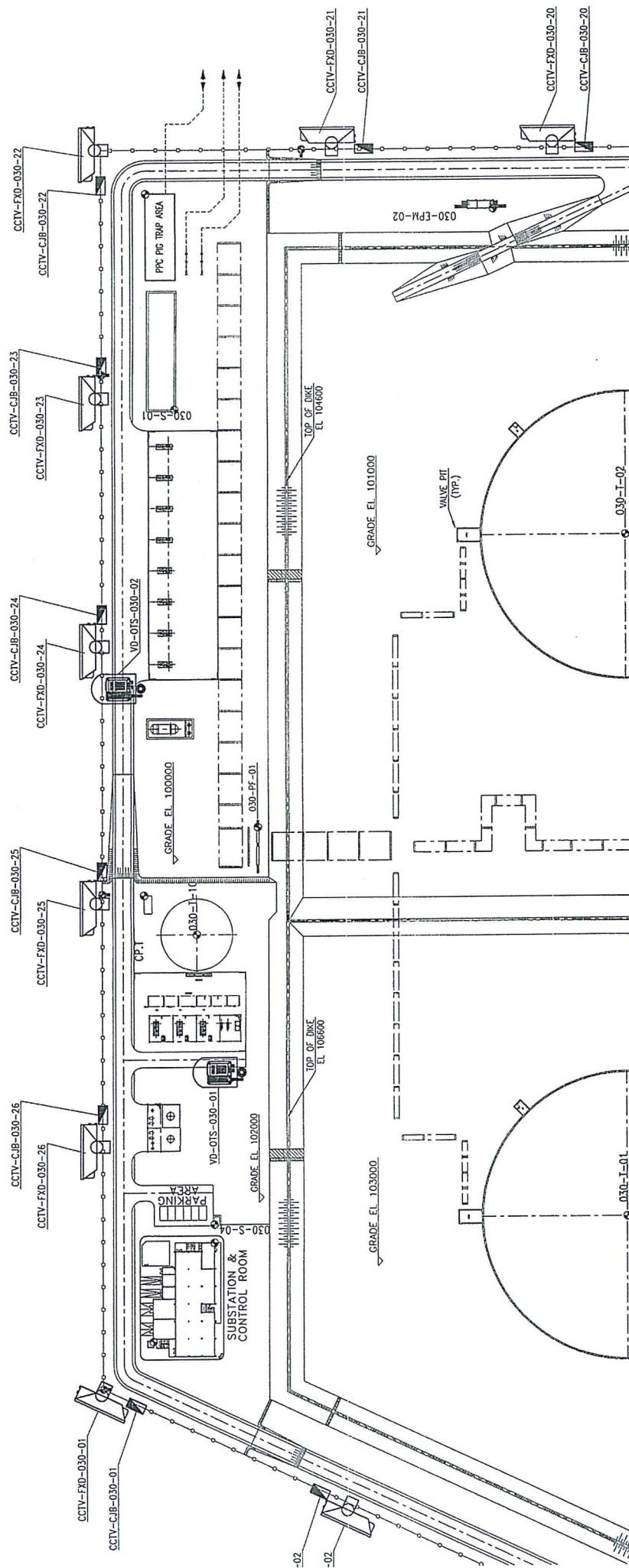


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12.02- Electrical Drawings





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12.03- Motor Datasheets



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12.04- Electrical Cables Schedule

ITEM	CABLE TAG	CABLE COMPOSITION	SIGNAL TYPE	ARM.	FROM		TO		LENGTH (m)	EXT. COLOUR SHEATH	EXT. DIAM. (mm)	DRUM NO.	NOTE
					FROM	DESCRIPTION	TO	DESCRIPTION					
Analog Network													
1	VD-TEL-030-01	2x2x0.6	Analog	SWA	VD-MDF-030-01	INDOOR TELEPHONE MDF	VD-OTS-030-01	OUTDOOR TELEPHONE SET	130	BLACK	10.6	2B/13844/2020/01	
2	VD-TEL-030-02	2x2x0.6	Analog	SWA	VD-MDF-030-01	INDOOR TELEPHONE MDF	VD-OTS-030-02	OUTDOOR TELEPHONE SET	335	BLACK	10.6	2B/13844/2020/01	
3	VD-TEL-030-03	10x2x0.6	Analog	SWA	VD-MDF-030-01	INDOOR TELEPHONE MDF	VD-OJB-030-01	OUTDOOR TELEPHONE JB	860	BLACK	13.6	2B/13844/2020/02	
4	VD-TEL-030-04	CAT. 6A	Analog	F/UTP	VD-OJB-030-01	OUTDOOR TELEPHONE JB	VD-14	TELEPHONE OUTLET	35	BLACK	9.1	OUTDOOR CAT6A	
5	VD-TEL-030-05	CAT. 6A	Analog	F/UTP	VD-OJB-030-01	OUTDOOR TELEPHONE JB	VD-16	TELEPHONE OUTLET	40	BLACK	9.1	OUTDOOR CAT6A	
6	CCTV-CAM-030-09	CAT. 6A	Analog	F/UTP	CCTV-CIB-030-09	CCTV JB	CCTV-FXD-030-09	OUTDOOR FIXED IP CAMERA	40	BLACK	9.1	OUTDOOR CAT6A	
7	CCTV-MON-030-01	CAT. 6A	Analog	F/UTP	CCTV-CIB-030-09	CCTV JB	VD-15	DATA OUTLET	35	BLACK	9.1	OUTDOOR CAT6A	
8	VD-OUT-030-01	CAT. 6A	Analog	U/UTP	VD-LPP-030-01	UTP PATCH PANEL (V&D MAIN RACK)	VD-01	V & D OUTLET	25	BLUE	5.7	INDOOR CAT6A	
9	VD-OUT-030-02	CAT. 6A	Analog	U/UTP	VD-LPP-030-01	UTP PATCH PANEL (V&D MAIN RACK)	VD-02	V & D OUTLET	25	BLUE	5.7	INDOOR CAT6A	
10	VD-OUT-030-03	CAT. 6A	Analog	U/UTP	VD-LPP-030-01	UTP PATCH PANEL (V&D MAIN RACK)	VD-03	V & D OUTLET	25	BLUE	5.7	INDOOR CAT6A	
11	VD-OUT-030-04	CAT. 6A	Analog	U/UTP	VD-LPP-030-01	UTP PATCH PANEL (V&D MAIN RACK)	VD-04	V & D OUTLET	25	BLUE	5.7	INDOOR CAT6A	
12	VD-OUT-030-05	CAT. 6A	Analog	U/UTP	VD-LPP-030-01	UTP PATCH PANEL (V&D MAIN RACK)	VD-05	V & D OUTLET	35	BLUE	5.7	INDOOR CAT6A	
13	VD-OUT-030-06	CAT. 6A	Analog	U/UTP	VD-LPP-030-01	UTP PATCH PANEL (V&D MAIN RACK)	VD-06	V & D OUTLET	65	BLUE	5.7	INDOOR CAT6A	
14	VD-OUT-030-07	CAT. 6A	Analog	U/UTP	VD-LPP-030-01	UTP PATCH PANEL (V&D MAIN RACK)	VD-07	V & D OUTLET	35	BLUE	5.7	INDOOR CAT6A	
15	VD-OUT-030-08	CAT. 6A	Analog	U/UTP	VD-LPP-030-01	UTP PATCH PANEL (V&D MAIN RACK)	VD-08	V & D OUTLET	45	BLUE	5.7	INDOOR CAT6A	
16	VD-OUT-030-09	CAT. 6A	Analog	U/UTP	VD-LPP-030-01	UTP PATCH PANEL (V&D MAIN RACK)	VD-09	V & D OUTLET	45	BLUE	5.7	INDOOR CAT6A	
17	VD-OUT-030-10	CAT. 6A	Analog	U/UTP	VD-LPP-030-01	UTP PATCH PANEL (V&D MAIN RACK)	VD-10	V & D OUTLET	55	BLUE	5.7	INDOOR CAT6A	
18	VD-OUT-030-11	CAT. 6A	Analog	U/UTP	VD-LPP-030-01	UTP PATCH PANEL (V&D MAIN RACK)	VD-11	V & D OUTLET	45	BLUE	5.7	INDOOR CAT6A	
19	VD-OUT-030-12	CAT. 6A	Analog	U/UTP	VD-LPP-030-01	UTP PATCH PANEL (V&D MAIN RACK)	VD-12	V & D OUTLET	45	BLUE	5.7	INDOOR CAT6A	
20	VD-OUT-030-13	CAT. 6A	Analog	U/UTP	VD-LPP-030-01	UTP PATCH PANEL (V&D MAIN RACK)	VD-13	V & D OUTLET	45	BLUE	5.7	INDOOR CAT6A	

Cable Mark	GL1	FROM	TO	GL2	CABLEService	Service Voltage	KW	Size
P1-VD-TRK-030-01	WP	030-SUB-UPDP-1 (L20)	VD-TRK-030-01 PS1	WP	IPH POWER FEEDER	230VAC	4	3x10
P2-VD-TRK-030-01	WP	030-SUB-UPDP-1 (L21)	VD-TRK-030-01 PS2	WP	IPH POWER FEEDER	230VAC	4.0	3x10
P1-CCTV-CRK-030-01	WP	030-SUB-UPDP-1 (L22)	CCTV-CRK-030-01 PS1	WP	IPH POWER FEEDER	230VAC	4	3x10
P2-CCTV-CRK-030-01	WP	030-SUB-UPDP-1 (L23)	CCTV-CRK-030-01 PS2	WP	IPH POWER FEEDER	230VAC	4	3x10
P3-VD-TRK-030-01	WP	030-SUB-ASP-1 (Q20)	VD-TRK-030-01 AUX.	WP	IPH POWER FEEDER	230VAC	0.5	3x4
P3-CCTV-CRK-030-01	WP	030-SUB-ASP-1 (Q21)	CCTV-CRK-030-1 AUX.	WP	IPH POWER FEEDER	230VAC	0.5	3x4

2

SWITCHGEAR ROOM

CONTROL / TELECOM / SECURITY ROOMS

030-SUB-UPDP-1

BL	○	L15	○	BR
BK	○	L15	○	BL
○	○	PE	○	YG

P2-030-CONSOLE-001
3X4mm²030-CONSOLE-001
SECOND & THIRD UNIT

BR	○	1	○
BK	○	1	○
YG	○	PE	○

P1-030-FGS-SC-001
3X4mm²

030-FGC-SC-001

BR	○	L	○	○
BL	○	N	○	○
YG	○	PE	○	○

P2-030-FGS-SC-001
3X4mm²

030-TGS-001

BR	○	1	○
BL	○	2	○
YG	○	PE	○

P1-030-TGS-001
3X4mm²P2-030-TGS-001
3X4mm²

VD-TRK-030-01

BR	○	L	○	○
BL	○	N	○	○
YG	○	PE	○	○

P1-VD-TRK-030-01
3X4mm²P2-VD-TRK-030-01
3X4mm²

CCTV-CRK-030-01

BR	○	1	○
BL	○	2	○
YG	○	PE	○

P1-CCTV-CRK-030-01
3X4mm²P2-CCTV-CRK-030-01
3X4mm²

030-FIT-007

BR	○	L	○	○
BL	○	N	○	○
YG	○	PE	○	○

P-030-FIT-007
3X4mm²

030-FIT-008

BR	○	L	○	○
BL	○	N	○	○
YG	○	PE	○	○

P-030-FIT-008
3X4mm²

030-FIT-009

BR	○	L	○	○
BL	○	N	○	○
YG	○	PE	○	○

P-030-FIT-009
3X4mm²

R	○	L27	○	BR
BK	○	L27	○	BL
○	○	PE	○	YG

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THE NATIONAL PETROLEUM COMPANY
EGPC

EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
ELECTRICAL INTERCONNECTION & WIRING DIAGRAM
ACUPS DISTRIBUTION PANEL (Cont.)
(030-SUB-UPDP-1)

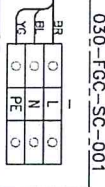
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EGPC
THE NATIONAL PETROLEUM COMPANY
EGPC

SCALE: NONE
DOCUMENT NUMBER: 01251-100-030-EWI-001
SHEET: 078 OF 078

SUBSTATION AND CONTROL BUILDING

CONTROL / TELECOM / SECURITY ROOMS



EGPC
THE EGYPTIAN GENERAL PETROLEUM CO.

AT : AGROOD

030-SUB-ASP-1

لشركه الهندسيه للصناعات البتروليه والكيماويه

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ENGINEERING FOR THE PETROLEUM AND PROCESS INDUSTRIES

SCALE	DOCUMENT NUMBER	SHEET	DATE
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NONE	01251-100-030-EWI-001	20 OF 078
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[illegible]



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-TE-001
System Description	Integrated Voice & Data System

12.04- Electrical Cables Schedule



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-TE-001
System Description	Integrated Voice & Data System

12.05- Electrical Cables Laying Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-TE-001
System Description	Integrated Voice & Data System

12.06- Electrical Cables Testing Certificates



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EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE INSULATION RESISTANCE TEST

INSPECTION REPORT NUMBER

REF:

INSTRUMENT TYPE:

INSPECTION DATE & TIME

DOCUMENT NO.
ITR-EL-0006A

DISCIPLINE
ELECTRICAL

SYSTEM NO.:

SHEET NO

AREA / PACKAGE:

SERIAL:

SERVICE VOLTAGE:
220 v

TEST VOLTAGE:
1kv

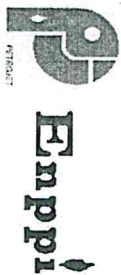
N	Item/Tag NO.	CABLE SIZE	Continuity Test	PHASE TO PHASE "M.Ohm"			PHASE TO NEUTRAL "M.Ohm"			PHASES & NEUTRAL TO ARMOR "M.Ohm"			RESULT	
				BR-BK	BR-GR	BK-GR	BR-B	BK-B	GR-B	BR-ARM	BK-ARM	GR-ARM	B-ARM	Pass / FAIL
1	P1-CCTV-CRK-030-01	3x10	✓											✓
2	P2-CCTV-CRK-030-01	3x10	✓											✓
3	P3-CCTV-CRK-030-01	3x4	✓											✓
4	P1-VD-TRK-030-01	3x10	✓											✓
5	P2-VD-TRK-030-01	3x10	✓											✓
6	P3-VD-TRK-030-01	3x4	✓											✓
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														

Remarks :-

Reference :-

NAME :		PETROJET		⑧ Isenppi Sherif		PMC	
SIGNATURE							
DATE							

ITR-EL-0006A



EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE INSULATION RESISTANCE TEST

SYSTEM NO.:

INSPECTION REPORT NUMBER

INSPECTION DATE & TIME

RFI-27 255

DOCUMENT NO.
ITR-EL-0006A

DISPUNE
ELECTRICAL

SHEET NO

INSTRUMENT TYPE:

SERIAL:

SERVICE VOLTAGE:

TEST VOLTAGE:

AREA / PACKAGE:

220 v

1kv

NO	Item/Tag NO.	CABLE SIZE	Continuity Test	PHASE TO PHASE "M.Ohm"			PHASE TO NEUTRAL "M.Ohm"			PHASES & NEUTRAL TO ARMOR "M.Ohm"			RESULT		
				BR-BK	BR-GR	BK-GR	BR-B	BK-B	GR-B	BR-ARM	BK-ARM	GR-ARM	B-ARM	Pass	FAIL
1	P1-VD-TRK-031-01	3x10	✓											✓	
2	P2-VD-TRK-031-01	3x10	✓											✓	
3	P1-CCTV-CRK-031-01	3x10	✓											✓	
4	P2-CCTV-CRK-031-01	3x10	✓											✓	
5	P3-VD-TRK-031-01	3x4	✓											✓	
6	P3-CCTV-CRK-031-01	3x4	✓											✓	
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															

Remarks :-

Reference :-

PETROJET		ENPPI		PMC	
NAME :					
SIGNATURE	Sobh @ Islam Sherif				
DATE	14/11/2024				

ITR-EL-0006A



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-TE-001
System Description	Integrated Voice & Data System

12.07- Electrical Cables Termination Certificates

**Enppi**

EGPC CRUDE OIL TANK FARM



Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001
Revision No. : 00**REQUEST FOR INSPECTION**

ACTIVITY : CABLE TERMINATION AND SPLICING

NOTIFICATION NO. : PTJ-ELEC-RFI- 255 DISCIPLINE : E&I

DATE : 9/2/2021

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	CABLE TERMINATION AND SPLICING	MODULE 1	2-Sep-21				
1	P1-VD-TRK-031-01						
2	P2-VD-TRK-031-01						
3	P1-CCTV-CRK-031-01						
4	P2-CCTV-CRK-031-01						
5	P3-VD-TRK-031-01						
6	P3-CCTV-CRK-031-01						
7							
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20							
21							
22							

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-QC-0001



EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE TERMINATION AND SPLICING

SYSTEM NO.:

INSPECTION REPORT NUMBER

255

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0009

DISCIPLINE

ELEC

SHEET NO

1 OF 1

Item/Tag NO.

Type :-

Core:

Size:

NO.	Description of check	RESULT		
		ACCEPT	REJECT	N/A.
1	Check cable glands are correct type and size as per cable schedule.	✓		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	✓		
3	Check cable tag is done correctly.	✓		
4	Test and confirm conductor, phase continuity.	✓		
5	Check insulation resistance test (megger) is completed *I	✓		
6	Check Hi-pot test is completed, only for MV/HV cables *II			✓
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.	✓		
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications	✓		
9	Check enclosure cover is installed, no damages and no bolts are missing	✓		
10	Calibration test certificate of testing equipment to be checked.			✓

Remarks :

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-0009

**Enppi**

EGPC CRUDE OIL TANK FARM



Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001
Revision No. : 00**REQUEST FOR INSPECTION**

ACTIVITY : CABLE TERMINATION AND SPLICING

NOTIFICATION NO. : PTJ-ELEC-RFI- 256 DISCIPLINE : E&I

DATE : 9/2/2021

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	CABLE TERMINATION AND SPLICING	MODULE 1	2-Sep-21				
1	P1-CCTV-CRK-030-01						
2	P2-CCTV-CRK-030-01						
3	P3-CCTV-CRK-030-01						
4	P1-VD-TRK-030-01						
5	P2-VD-TRK-030-01						
6	P3-VD-TRK-030-01						
7							
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18							
19							
20							
21							

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-QC-0001



EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE TERMINATION AND SPLICING

SYSTEM NO.:

INSPECTION REPORT NUMBER

256

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0009

DISCIPLINE

ELEC

SHEET NO

1 OF 1

Item/Tag NO.

Type :-

Core:

Size:

NO.	Description of check	RESULT		
		ACCEPT	REJECT	N/A.
1	Check cable glands are correct type and size as per cable schedule.	✓		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	✓		
3	Check cable tag is done correctly.	✓		
4	Test and confirm conductor, phase continuity.	✓		
5	Check insulation resistance test (megger) is completed *I	✓		
6	Check Hi-pot test is completed, only for MV/HV cables *II			✓
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.	✓		
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications	✓		
9	Check enclosure cover is installed, no damages and no bolts are missing	✓		
10	Calibration test certificate of testing equipment to be checked.			✓

Remarks :

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-0009

**Enppi****EGPC CRUDE OIL TANK FARM**Owner : **Egyptian General Petroleum Corporation (EGPC)**Project No: 01251-100-030
:01251-100-031Contractor **CONSORTIUM (ENPPI / PETROJET)**Document No: ITR-QC-0001
Revision No. : 00**REQUEST FOR INSPECTION**ACTIVITY : **CABLE TERMINATION AND SPLICING**NOTIFICATION NO. : **PTJ-TEL-RFI- 12** DISCIPLINE : **E&I**DATE : **11/3/2021**

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	CABLE TERMINATION AND SPLICING	MODULE 1	3-Nov-21				
1	VD-TEL-030-01						
2	VD-TEL-030-02						
3	VD-TEL-030-03						
4							
5							
6							
7							
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17							
18							
19							
20							
21							

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-QC-0001



EGPC CRUDE OIL TANK FARM



ATION AND TEST REPORT FOR

CABLE TERMINATION AND SPLICING

SYSTEM NO.:

INSPECTION REPORT NUMBER

INSPECTION DATE & TIME

ITR NUMBER

DISPLINE

SHEET NO

ITR-EL-0009

ELEC

1 OF

Item/Tag NO.

Type :-

Core:

Size:

NO.	Description of check	RESULT		
		ACCEPT	REJECT	N/A.
1	Check cable glands are correct type and size as per cable schedule.	✓		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	✓		
3	Check cable tag is done correctly.			
4	Test and confirm conductor, phase continuity.	✓		
5	Check insulation resistance test (megger) is completed *I	✓		
6	Check Hi-pot test is completed, only for MV/HV cables *II			
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.	✓		
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications	✓		
9	Check enclosure cover is installed, no damages and no bolts are missing	✓		
10	Calibration test certificate of testing equipment to be checked.			

Remarks :

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-00



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-TE-001
System Description	Integrated Voice & Data System

12.08- FAT Reports & Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-TE-001
System Description	Integrated Voice & Data System

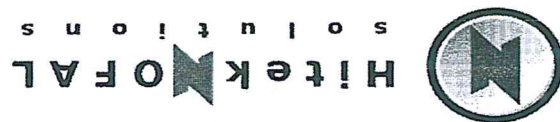
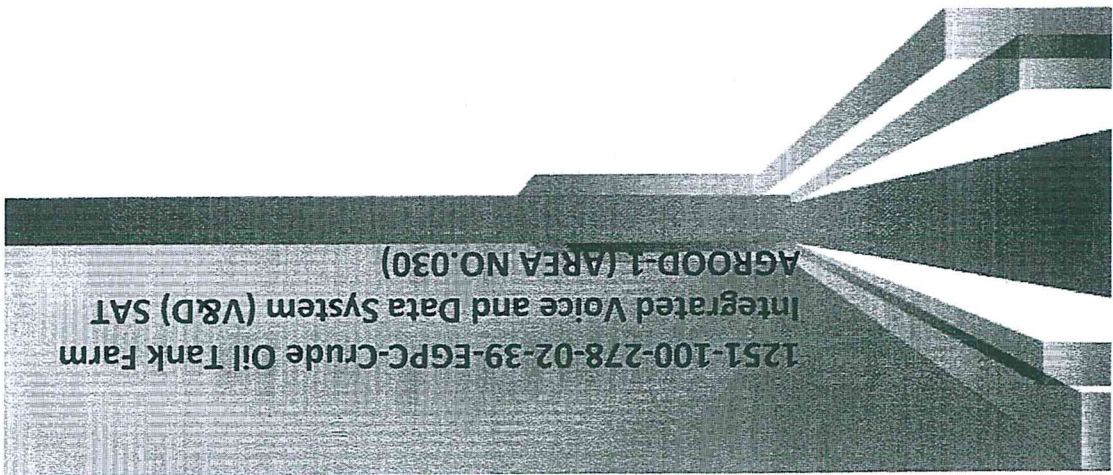
12.09- SAT Reports & Certificates

SUPPLIER'S DOCUMENT COVER PAGE
(FOR A4/A3 DOCUMENTS ONLY)

SUPPLIER'S NAME : HITEKNOFAL	
PURCHASE ORDER No : 1251-100-277-02-40	
DOCUMENT TITLE : SAT Procedures Agrood Area 30	TOTAL No OF PAGES : 27
SUPPLIER'S ORDER No : LPO/1078/2020	

SUPPLIER'S OWN DOCUMENT No		ENP-2020-1078-P06	
SUPPLIER'S REVISION	0	DATE	3/11/2021
SUPPLIER APPROVAL SIGNATURE			

SUPPLIER DOCUMENT REVIEW		PROJECT TITLE : CRUDE OIL TANK FARM	ENPPI PROJECT NUMBER : 1251-100	PACKAGE DESCRIPTION : Integrated Voice and Data System	EQUIPMENT TAG : NA	CODE IDENTIFIER : P06	DOCUMENT NUMBER	REV	0
<input type="checkbox"/> 1. WORK MAY PROCEED. <input type="checkbox"/> 2. COMMENTS, WORK MAY PROCEED SUBJECT TO REVISION AND RESUBMIT IN ACCORDANCE WITH INCORPORATION OF CHANGES INDICATED. <input type="checkbox"/> 3. REVISION AND RESUBMIT, (MAJOR COMMENTS) WORK MAY NOT PROCEED. <input type="checkbox"/> 4. REJECTED, (REASON TO BE SPECIFIED ON THE DOCUMENT). <input type="checkbox"/> 5. HOLD FOR A SPECIFIC REASON (TO BE SPECIFIED ON THE DOCUMENT).		NAME: SIGNATURE: DATE:							





Document Control

Prepared for
EGPC (Company)
ENPPI (Contractor)

Document Information

Prepared by
HitekNOFAL Solutions (Supplier)

Document Title	Document Owner	Document Classification
EGPC-Crude Oil Tank Farm SAT	HitekNOFAL Solutions	Confidential

Document Record

Date	Author	Title	Version	Change Reference
11-2021	Ahmed Ali	Senior System Engineer	1.0	Initiate

Table of contents

1. Document purpose
2. Overview and purpose of the project
3. Abbreviations
4. Delivered material (BOM)
5. Cabinets Test
6. Rules for retesting any failed Functional Test
7. Punch list report
8. Table of signatures





1. Document Purpose

The purpose of this document is to describe the Site Acceptance Test (SAT) for the Integrated Voice & Data System to be installed in EGPC Crude Oil Tank Farm Project AGROOD-1 (AREA NO.030).

The purpose of the SAT is to check all system components operation and test system features after installation on Site.

2. Overview & Purpose of the project

The system is based on IP network LAN and voice Systems for EGPC crude oil tank farms that will serve for all data and Voice System and connectivity with all data and telephony outlets. Provide Network connectivity and collaboration services with analog and IP telephony system to all users on local network of EGPC farms sites via latest Cisco technologies (switching system and collaboration services).

3. Abbreviations

VLAN	Virtual Local Area Network
SW	Cisco Switch
POST	Power on Self-test
IOS	Internetworking operating system
CLI	Command line interface
UTP	Unshielded twisted pair
TFTP	Trivial file transfer protocol
SIP	Session initiate protocol
CUCM	Cisco Unified Call Manager



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4. Visual Inspection for system components

Ref. In PO	Item Description	Brand	P/N	Unit	Qty	Remark
1.1.1	Cisco Business Edition 6000M (M5) Appliance, Export Restr SW	CISCO	BEGM-M5-K9	E	1	
1.1.31	Cisco Unified Attendant Consoles 12.x	CISCO	L-CUAC12X	Lic	1	
1.1.33	Cisco ISR 4321 Bundle, w/UC License	CISCO	ISR4321-V/K9	Lic	1	
1.2	Cisco IP Phone 8841	CISCO	CP-8841-K9=	E	7	
1.3	Outdoor Telephone sets Complete with Telephone protection hood type 404 / Synthetic Material	FHF	FHF11286101	E	2	
1.3	Telephone protection hood type 404	FHF	11890112	E	2	
1.4	Modular 24 FXS Port VoIP Gateway with PVD3-64	CISCO	VG310	E	1	
1.5	Outdoor Telephone Junction Box	Local		E	1	
1.6	Indoor Telephone MDF	R&M	R27102-060	E	1	
1.7	Outlets & Accessories: RJ45 Single Flush mounted type	HitekNOFAL	HN-17-0464	E	20	
1.7	Outlets & Accessories: Completed with CAT6 UTP Keystone Jacks	HitekNOFAL	HN-17-0245	E	20	
1.7	Outlets & Accessories: Completed with BackBox	HitekNOFAL	HN-17-0722	E	20	
1.8	Lenovo Workstation complete with Lenovo D22 LCD, Keyboard and Mouse	LENOVO	ThinkstationP330	E	1	
1.9	Indoor Analog Desktop Telephone Set	Panasonic	KX-TS880	E	1	



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	Catalyst 9200L 24-port PoE+, 4 x 1G, Network Essentials	CISCO	C9200L-24P-4G-E	E	1	
2.1.1	Essentials			E	1	
2.2	Cat6 UTP Patch panel	HitekNOFAL	HN-17-0457	E	1	
2.3	Cat6 UTP Patch Cord (1m) - Legrand	Legrand	51874	E	20	
2.4	Cat6 UTP Patch Cord (3m) - Legrand	Legrand	51876	E	15	
2.5	IP42 Cabinet 19" 42U	HitekNOFAL	HN-19-0064	E	1	
2.5	2 U Vertical Aluminum 8-way German Socket with Circuit breaker and built-in surge protector	Canovate	PB-S08-011-116-1A1F-W-2U	E	2	
2.6.1	2 Pair Copper Cable 2x2x0.6mm twisted Pair	El-Sewedy	TCU/PE/OS/SWA/HDPE	Meter	600	
2.6.2	10 Pair Copper Cable 10x2x0.6mm twisted Pair	El-Sewedy	TCU/PE/OS/SWA/HDPE	Meter	1000	
2.6.3	Indoor Cat 6A UTP Cable	BELDEN	2413	Box	5	
2.6.4	Outdoor Cat 6A UTP Cable	BELDEN	2141A	Meter	130	
2.7	Software Licenses All software licenses for system equipment including PBX, switches, IP telephone sets, etc.	CISCO		Lot	1	
3.3	Poles, 2 Mt Hight, galvanized steel fixed pole to support the outdoor telephone...etc.	Local	N/A	Each	2	
3.4.1	50mm PVC Conduits	Mistr EL Hegaz	N/A	Meter	55m	
3.4.2	50mm Heavy Gauge PVC-U Conduits	Marshall Tufflex	CRX50HG	Meter	20m	

All System components are installed as per Voice & Data System PO

YES

NO



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5. Functional Tests

5.1 Cisco 9200 CORE switch

Test Title	Test procedure	Acceptance criteria	Test results		Notes
			Pass	Fail	
Power on self-test	System power supply status	Validate if power supply of switch is powered up normally	✓		
IOS loading status	Validate that the IOS is loaded into the system memory	Check all LED Must be green on power supply chassis All tests must pass as following message : POST: CPU Buffer Tests : Begin POST: CPU Buffer Tests : End, Status Passed POST: CPU Interface Tests : Begin POST: CPU Interface Tests : End, Status Passed POST: Switch Core Tests : Begin POST: Switch Core Tests : End, Status Passed POST: CPU Interface 2nd Stage Tests : Begin POST: CPU Interface 2nd Stage Tests : End, Status Passed POST: CAM Subsystem Tests :	✓		



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		Begin POST: CAM Subsystem Tests : End, Status Passed POST: Ethernet Controller Tests : Begin POST: Ethernet Controller Tests : End, Status Passed	
Switch Interface Status	Validate that all the line cards are powered up.	Check all LED on line cards must be green and up	✓
Port / Module status	Validate that all ports are operational and in green LED	Check all LED on cards must be green in normal operation	✓
Wiring / Connection status	Validate all passive connection to switches are installed	Check all fiber cord and UTP cords connection to switches	✓
Labels	Validate switch labels	Check labels of installed switch and Patch cords connection labels	
Power supply Hot standby redundancy	Validate installation of two power supplies on switch chassis	Disconnect one of the power sources to switch and let switch operate in other source	✓
Protective earth	Validate installation of earthing system	Check earthing cable that connected from Rack and earthing bar	✓



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Layer 2 configuration	VLAN creation	Validate that the proper VLANs are created on Switches	On CLI of switch type the following command to ensure vlans are created Switch# show interface vlan Output# vlan 100 data Vlan 200 voice	
Trunk Configuration (Future Use)	Validate that all the trunk links are configured as per the LLD Document	You can check trunk ports on switch by typing the following command, Switch# show interface trunk Output# it will list all interfaces that configured as a trunk ports	✓	
Layer 3 configuration	Intervlan routing applied	Validate configuration of Intervlan routing Check if we can reach all vlans in network as per configured Intervlan routing Switch# ping ip address Output# reply with ip address	✓	
Common Features (licenses, Software, Versions, ...etc)		Validate all the Common Features Check if the common features are valid or not	✓	
Port POE	Validate The POE over all ports	Check The POE over all ports	✓	
CISCO Unified Attendant Console Features	Telephony Features (Core Call Controls, call Park, Call History, ...etc)	Validate the Telephony features Check the Telephony features		



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Directory Features (Personal directory groups, Unified directory search and Presence integration)	Validate the Directory Features	Check the Directory features		
Administrative features (Sign-in device restriction, Configuration lockdown and Application dial rules synchronization)	Validate the Administrative Features	Check the Administrative Features		



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5.2 Cisco BE6000 Voice Server

Test Title	Test procedure	Acceptance criteria	Test results		Notes
			Pass	Fail	
Power Test	System Power supply status	Validate if power supply of Server is powered up normally	✓		
	OS loading	Validate server operating system loading into RAM	✓		
	Wiring / Connection status	Validate all passive connection to the server are installed	✓		
	Labels	Validate Server labels			
	Protective earth	Validate installation of earthing system	✓		
Layer 2 Configuration	Power supply Hot standby Redundancy	Validate installation of two power supplies on Server chassis	✓		
	Hardware modules status	Validate all server hardware modules and specs	✓		
	VLAN assignment	Validate that server has assigned to its appropriate VLAN	✓		
		Check hardware of server modules and specs as per ordered			
		Check from network setting on server OS that has correct IP address of VLAN			



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12



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5.3 Cisco ISR 4321 Router

Test Title	Test procedure	Acceptance criteria	Test results	Notes
			Pass Fail	
Power Test	System Power supply status	Validate if power supply of Router is powered up normally	✓	
	IOS Loading Status	Validate that the IOS is loaded into the system memory	✓	
		Check Router operation LED status working		
		All tests must pass as following message:		
		POST: CPU Buffer Tests: Begin		
		POST: CPU Buffer Tests: End, Status Passed		
		POST: CPU Interface Tests: Begin		
		POST: CPU Interface Tests: End, Status Passed		
		POST: Switch Core Tests: Begin		
		POST: Switch Core Tests: End, Status Passed		
		POST: CPU Interface 2nd Stage Tests: Begin		
		POST: CPU Interface 2nd Stage Tests: End, Status Passed		
		POST: CAM Subsystem Tests: Begin		
		POST: CAM Subsystem Tests: End, Status Passed		
		POST: Ethernet Controller Tests: Begin		
		POST: Ethernet Controller Tests: End, Status Passed		
		POST: Loopback Tests: Begin		



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	Router interface Status	Validate that all the line cards are powered up.	POST: Loopback Tests: End, Status Passed	✓
	Port / Module status	Validate that all ports are operational and in green LED	Check all LED on line cards must be green and up	✓
	Wiring / Connection status	Validate all passive connection to the Switch are installed	Check all LED on cards must be green in normal operation	✓
	Labels	Validate Router labels	Check all UTP cords connection to the Switch.	✓
	Protective earth	Validate installation of earthing system	Check labels of installed Router and Patch cords connection labels	✓
	Trunk Configuration (Future Use)	Validate that all the trunk links are configured as per the LLD Document	Check earthing cable that connected from Rack and earthing bar	✓
			You can check trunk ports on switch by typing the following command, switch# show interface trunk	✓
			Output# it will list all interfaces that configured as a trunk ports	
Layer 3 configuration	Routing protocol applied	Validate configuration of routing protocol	Check if we can reach all vians in network as per configured routing	✓
			Router# ping ip address	
			Output# reply with ip address	✓



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5.4 Cisco 8841 IP Phone

Test Title	Test procedure	Acceptance criteria	Test results	Notes
Power Test	System Power status	Validate if power POE of switch to phone powered up normally	✓	
	OS loading	Validate IP Phone operating system loading from server	✓	
	Wiring / Connection status Labels	Validate passive connections to the IP Phone and server are installed Validate IP Phone labels	✓	
Layer 2 configuration	VLAN assignment	Validate that IP Phone has assigned to its appropriate VLAN	✓	
Layer 3 configuration	TFTP setting	Validate if IP phone receives correct configuration from TFTP server	✓	
	IP phone Registration	Validate IP phone registration to CUCM server and working	✓	



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5.5 Cisco VG 310 gateway

Test Title	Test procedure	Acceptance criteria	Test results	Notes
Power status		Check all LED Must be green on power supply chassis	Pass	
System power supply status	Validate if power supply of VG is powered up normally		✓	
IOS loading status	Validate that the IOS is loaded into the system Memory	All tests must pass as following message: POST: CPU Buffer Tests: Begin POST: CPU Buffer Tests: End, Status Passed POST: CPU Interface Tests: Begin POST: CPU Interface Tests: End, Status Passed POST: Switch Core Tests: Begin POST: Switch Core Tests: End, Status Passed POST: CPU Interface 2nd Stage Tests : Begin POST: CPU Interface 2nd Stage Tests : End, Status Passed POST: CAM Subsystem Tests: Begin POST: CAM Subsystem Tests: End, Status Passed POST: Ethernet Controller Tests: Begin	✓	



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POST: Ethernet Controller Tests: End			
VG interface Status	Validate that all the line cards are powered up.	Check all LED on line cards must be green and up	✓
Port / Module status	Validate that all ports are operational and in green LED	Check all LED on cards must be green in normal operation	✓
Wiring / Connection Status	Validate all passive connection to the VG are installed	Check all UTP cords connection to the VG	✓
Labels	Validate VG labels	Check labels of installed VG and Patch cords connection labels	
Protective earth	Validate installation of earthing system	Check earthing cable that connected from Rack and earthing bar	✓
Trunk Configuration (Future Use)	Validate that all the trunk links are configured as per the LLD Document	You can check trunk ports on switch by typing the following command, VG# show interface trunk Output# it will list all interfaces that configured as a trunk ports Check if the common features are valid or not	✓
Common Features (Licenses, Software, Versions,...etc)	Validate if the common features are valid or not		✓



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5.6 Analog Telephone Sets

Test Title	Test procedure	Acceptance criteria	Test results		Notes
			Pass	Fail	
Visual Check	Visual check on the telephones sets	Check status of analog telephones sets with its required accessories for operation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
VG connections	Validate all connectivity from analog phones to voice gateway	Check configuration of SIP registration for analog phones and VG in CUCM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	



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MDF Installation and Fluke Test

Test Title	Test procedure	Acceptance criteria	Test results		Notes
			Pass	Fail	
MDF Installation test	check the color code connection between multi pair cable & MDF physically Using tone testing tool to check the connection from end to end	Connected / Disconnected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Fluke Test – UTP Cables	Perform Fluke device testing UTP cable	Pass/Fail	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

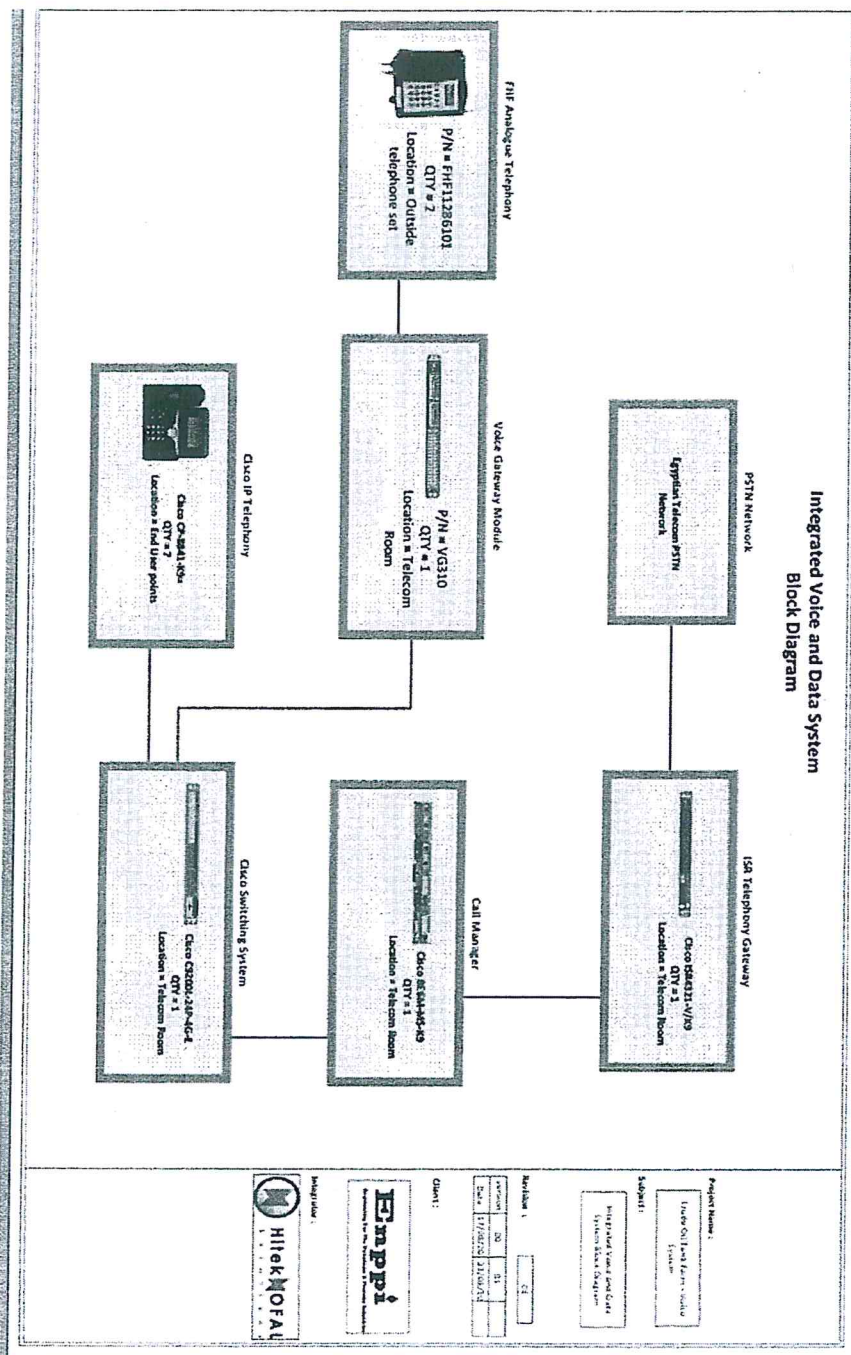
6. Rules for retesting any failed functional test:

- HitekNofal is responsible for resolving any issues related to any failed Functional test within 5 Working Days.



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Block Diagram





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Overall System Test Procedure

Test Title	Test procedure	Acceptance criteria	Test results		Notes
			Pass	Fail	
IP Addresses of voice system	Validate all IP schema for voice system and its components	Check all Ethernet and network setting for devices and must have an IP of same Voice system subnet	✓		
Dial and numbering plan	Validate all Dial plan and numbering as per LLD	Check all IP phones numbering and dial plan within CUCM configuration	✓		
Call forward	Validate if call forward features are configured	While receiving a call from DN, check if we transferee call to another DN using Soft key GUI in IP phone will ring or not	✓		
Call Back	Validate if call back feature is configured	check that you receive call-back notification on your Cisco Unified IP Phone when a called party line becomes available	✓		
Call Pickup	Validate if a call pickup group is configured	Check if we ring to a specific group of IP phones that any single phone of the group Can pick up the call	✓		
Three-way conference	Validate the conference calls configurations	Check to make a conference call among three IP phones	✓		
Don't disturb	Validate the configuration of don't disturb mode	By pressing a DND soft key on IP phone, this will activate don't disturb mode for this phone	✓		
Last Number redial	Validate the configuration of last number redial	Check soft key of redial last number on IP phone GUI and make a call	✓		
Call Waiting	Validate the configuration of call waiting configuration	Setup a call for an on-call IP phone and check the call waiting availability	✓		



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Hunt List	Validate configuration of Hunt Group list	Setup a call for a pilot Number and check that ringing in all hunt group for pickup		
On call power off	Validate call not be dropped if one power source has failed	Check by making a phone call is active while disconnecting one of switch power source	✓	

Cabinets Test

Test Title	Test procedure	Acceptance criteria	Test results		Notes
			Pass	Fail	
Cabinet Arrangement	Validate cabinet arrangement as per Approved drawings	Check if all active components are installed in rack as per rack layout configuration	✓		
Doors locks	Visual check for all doors locks for racks	Check and test locks for rack doors that are operational with keys			
Labels	Validate all rack equipment labels	Check that all active devices and passive cords have labels also Rack			
Fans	Validate all Fan operations for rack	Check power to all rack fan units and that it operates normally	✓		
Grounding	Validate that earthing is connected	Check earthing connection of Rack is connected to its body.	✓		
Wiring	Validate Internal Wiring as per approved drawings	Check all internal wiring inside rack as per approved and test all connectivity to active components.	✓		



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IP Schema

IP Phone	MAC Address	IP Address	Comment
IP Phone #1		172.16.30.650	
IP Phone #2		172.16.30.651	
IP Phone #3		172.16.30.652	
IP Phone #4		172.16.30.653	
IP Phone #5		172.16.30.654	
IP Phone #6		172.16.30.655	
IP Phone #7		172.16.30.656	
Panasonic Analog Phone		172.16.30.657	
FHF Outdoor Telephone Set-1		172.16.30.658	
FHF Outdoor Telephone Set-2		172.16.30.659	



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Active Components IP Schema:

#	Active Device	IP Address
1	Cisco Catalyst 9200 Core Switch	172.16.30.254
2	BE6K ESXI Virtual Server	172.16.30.251
3	BE6K CUCM server	172.16.30.250
4	BE6K CIMC Server Management	172.16.30.252
5	CISCO VG 310 Management	172.16.30.253
6	CISCO 8841 IP Phones and Analog Phones	172.16.30.50 - 70
7	Data VLAN	172.17.30.0/24
8	CISCO 4321 ISR Router	172.18.30.0/24



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Dial Plan

#	IP Phone	DN	
1	IP Phone #1	301	<i>Office 1</i>
2	IP Phone #2	302	<i>Office 2</i>
3	IP Phone #3	303	<i>Control room</i>
4	IP Phone #4	304	<i>Telecom room</i>
5	IP Phone #5	305	<i>Security room</i>
6	IP Phone #6	306	<i>Switch gear 1</i>
7	IP Phone #7	307	<i>Switch gear 2</i>
8	FHF Outdoor Telephone Set-1	310	
9	FHF Outdoor Telephone Set-2	311	
10	Panasonic Analog Phone	312,313	<i>Grand room</i>



6. Punch list report

No.	
1-	Cables shall be installed (Indoor & outdoor)
2-	Licenses for IP phones shall be installed.

EAPPI
 Mohamed Husein Touny
 4-11-2021
 Ahmed Ali
 4/11/2021
 Mohamed Omar
 4-11-2021
 PPC

Client	Signature	M. Omer
	Name	Mohamed Omer
	Job Title**	i. Engineer
	Date	4-11-2021

HitekNOFAL	Signature	A. Ali
	Name	System Engineer
	Job Title**	
	Date	4/11/2021

ENPPI	Signature	M. Saeed
	Name	Momen Saeed
	Job Title**	Specialist Telecom Engineer
	Date	4/11/2021

8. Table of signature

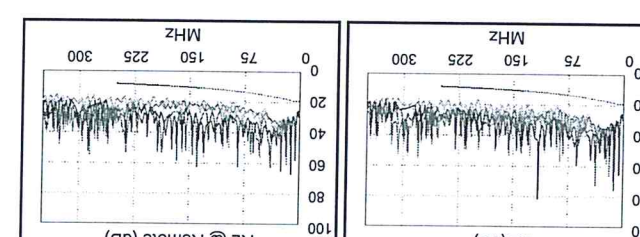
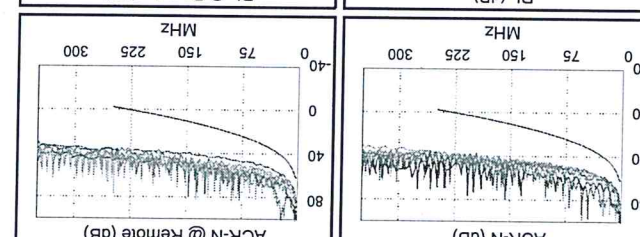
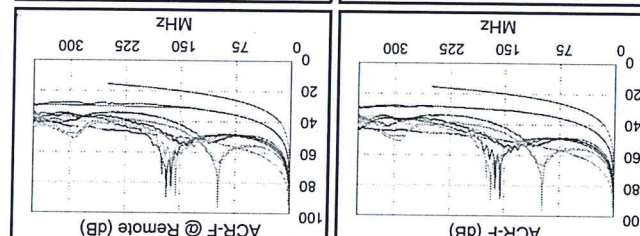
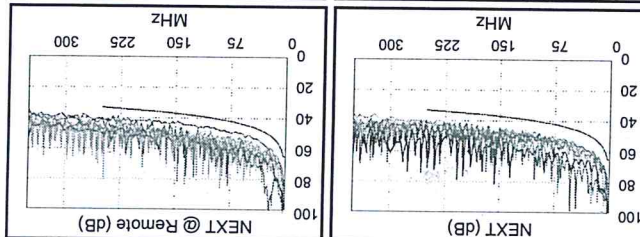
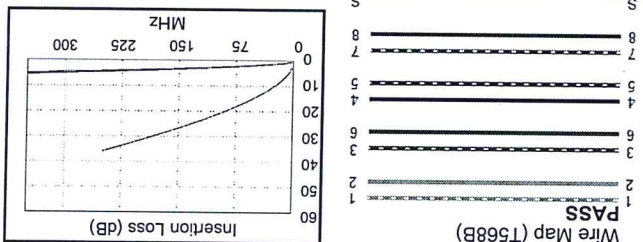


Cable ID	Summary	Test Limit	Length	Headroom	Date / Time
001	PASS	TIA Cat 6 Channel	12.8 m	5.0 dB (NEXT)	10/21/2021 10:33 AM
002	PASS	TIA Cat 6 Channel	14.9 m	6.2 dB (NEXT)	10/21/2021 11:19 AM
003	PASS	TIA Cat 6 Channel	11.6 m	5.3 dB (NEXT)	10/21/2021 11:26 AM
004	PASS	TIA Cat 6 Channel	14.9 m	6.3 dB (NEXT)	10/21/2021 10:46 AM
005	PASS	TIA Cat 6 Channel	13.7 m	1.0 dB (NEXT)	10/21/2021 10:49 AM
006	PASS	TIA Cat 6 Channel	32.5 m	1.1 dB (NEXT)	10/21/2021 10:50 AM
007	PASS	TIA Cat 6 Channel	23.2 m	4.9 dB (NEXT)	10/21/2021 10:51 AM
008	PASS	TIA Cat 6 Channel	29.2 m	6.2 dB (NEXT)	10/21/2021 11:04 AM
009	PASS	TIA Cat 6 Channel	31.0 m	3.2 dB (NEXT)	10/21/2021 11:05 AM
010	PASS	TIA Cat 6 Channel	32.3 m	5.3 dB (NEXT)	10/21/2021 11:10 AM
011	PASS	TIA Cat 6 Channel	25.2 m	5.7 dB (NEXT)	10/21/2021 11:11 AM
012	PASS	TIA Cat 6 Channel	25.4 m	6.2 dB (NEXT)	10/21/2021 11:14 AM
013	PASS	TIA Cat 6 Channel	24.4 m	8.3 dB (NEXT)	10/21/2021 11:17 AM

Total Length: 291.1 m
Number of Reports: 13
Number of Passing Reports: 13
Number of Failing Reports: 0
Number of Warning Reports: 0
Documentation Only: 0

Software Version: V6.6 Build 2
Calibration Date: 12/20/2020
Adapter: DSX-5000R (DSX-PLA004)
S/N: 4534039

12.8 m



Length (m), Limit 100.0	[Pair 1,2]	12.8
Prop. Delay (ns), Limit 555	[Pair 4,5]	66
Delay Skew (ns), Limit 50	[Pair 3,6]	4
Resistance (ohms)	[Pair 3,6]	2.26
Insertion Loss Margin (dB)	[Pair 3,6]	31.4
Frequency (MHz)	[Pair 3,6]	250.0
Limit (dB)	[Pair 3,6]	35.9

PASS		MAIN		SR	
Worst Pair	3.6-4.5	1.2-4.5	1.2-3.6	1.2-4.5	1.2-4.5
NEXT (dB)	6.2	5.0	7.1	5.5	5.5
Freq. (MHz)	197.0	146.5	246.5	235.5	235.5
Limit (dB)	34.9	37.1	33.2	33.6	33.6
Worst Pair	3.6	4.5	3.6	4.5	4.5
PS NEXT (dB)	6.5	6.1	7.0	6.2	6.2
Freq. (MHz)	197.0	228.0	250.0	228.5	228.5
Limit (dB)	32.0	30.9	30.2	30.8	30.8

Pass	MAIN	SR
Worst Pair	3,6-4,5	4,5-3,6
ACR-F (dB)	9,4	12,5
Freq. (MHz)	53,0	249,5
Limit (dB)	28,8	15,3
Worst Pair	4,5	4,5
PS ACR-F (dB)	11,5	14,2
Freq. (MHz)	7,0	234,0
Limit (dB)	43,4	12,9

PASS		MAIN		SR	
N/A	MAIN	SR	MAIN	SR	MAIN
Worst Pair	1,2,4,5	1,2,4,5	13,1	38,2	1,2,4,5
ACR-N (dB)	14,3	13,1	38,2	35,9	
Freq. (MHz)	3,0	4,5	246,5	235,5	
Limit (dB)	61,5	58,0	-2,4	-1,1	
Worst Pair	4,5	4,5	3,6	4,5	
PS ACR-N (dB)	14,1	14,0	38,5	38,6	
Freq. (MHz)	7,5	7,1	250,0	250,0	
Limit (dB)	50,6	51,1	-5,8	-5,8	

Worst Pair	RL (dB)	Freq. (MHz)	Limit (dB)
MAIN	1.2	199.5	9.0
SR	1.2	240.0	8.2
MAIN	1.2	8.6	8.2
SR	1.2	7.6	8.2

Compliant Network Standards:

100BASE-TX

2.5GBASE-T

ATM-51

TR-4

Cable ID: 002

Test Limit: TIA Cat 6 Channel

Limits Version: V7.6

Date / Time: 10/21/2021 11:19:05 AM

Operator: aymn abd mawgoud

Headroom 6.2 dB (NEXT 3,6-4,5)

Cable Type: Cat 6 U/UTP

NVP: 69.0%

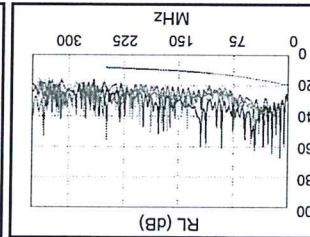
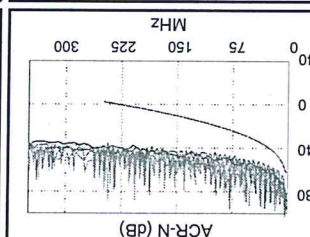
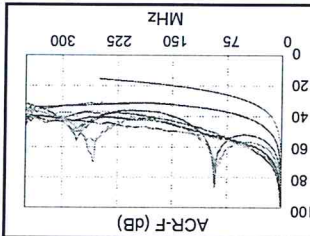
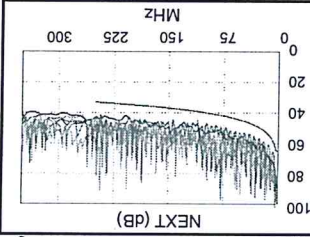
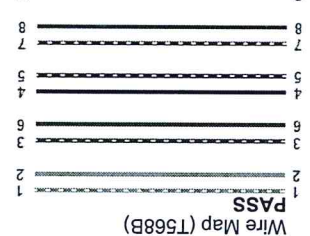
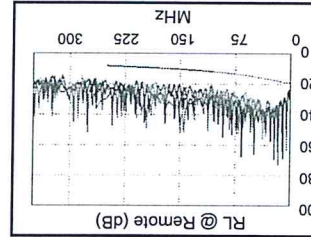
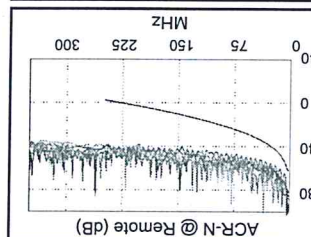
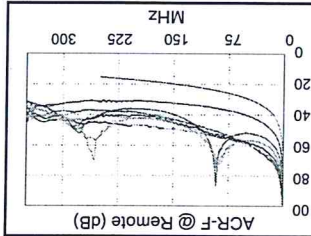
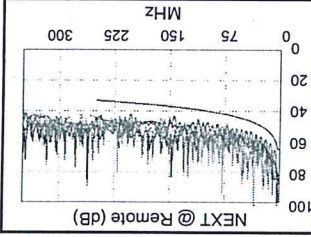
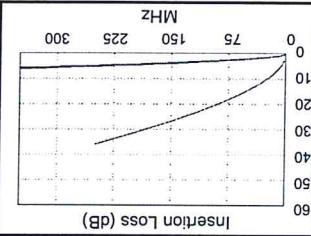
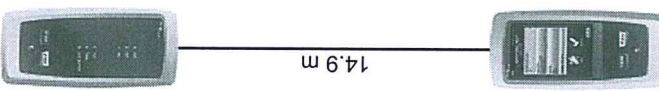
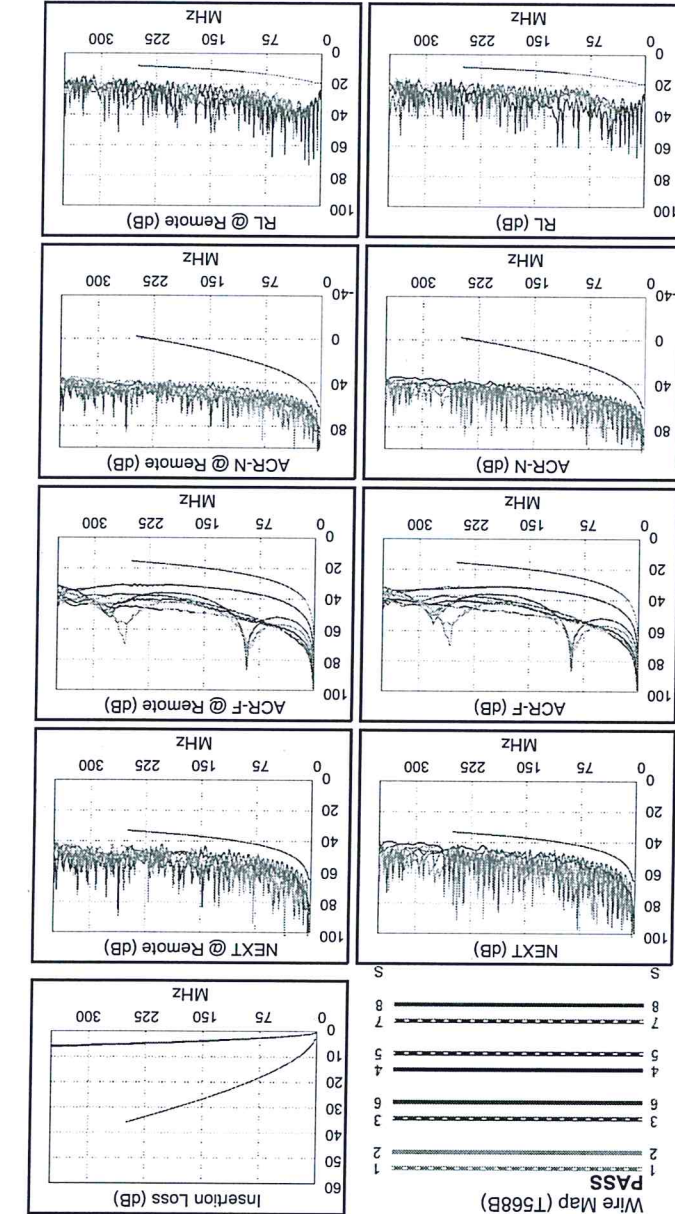
Length (m), Limit 100.0	[Pair 1,2]	14.9
Prop. Delay (ns), Limit 555	[Pair 4,5]	77
Delay Skew (ns), Limit 50	[Pair 4,5]	5
Resistance (ohms)	[Pair 3,6]	2.59
Insertion Loss Margin (dB)	[Pair 3,6]	30.8
Frequency (MHz)	[Pair 3,6]	249.5
Limit (dB)	[Pair 3,6]	35.9

Worst Case Margin Worst Case Value

PASS	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5
NEXT (dB)	6.2	7.9
Freq. (MHz)	112.0	144.5
Limit (dB)	39.1	37.2
Worst Pair	4,5	4,5
PS NEXT (dB)	7.9	9.1
Freq. (MHz)	26.4	7.5
Limit (dB)	47.0	43.9
PASS	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5
ACR-F (dB)	10.7	14.6
Freq. (MHz)	7.5	7.5
Limit (dB)	45.8	45.8
Worst Pair	4,5	4,5
PS ACR-F (dB)	12.8	13.0
Freq. (MHz)	1.4	7.0
Limit (dB)	57.5	43.4
N/A	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5
ACR-N (dB)	10.9	11.0
Freq. (MHz)	6.8	6.5
Limit (dB)	54.2	54.5
Worst Pair	4,5	3,6
PS ACR-N (dB)	12.4	12.4
Freq. (MHz)	6.5	6.5
Limit (dB)	52.0	52.0
PASS	MAIN	SR
Worst Pair	7,8	7,8
RL (dB)	8.4	9.3
Freq. (MHz)	108.0	209.5
Limit (dB)	11.7	8.8

Compliant Network Standards:

10BASE-T	100BASE-T4
1000BASE-T	2.5GBASE-T
ATM-25	ATM-51
100VG-AnyLan	TR-4
TR-16 Passive	TR-16 Active



Test Summary: PASS

Remote: Versiv

S/N: 3057139

Software Version: V6.6 Build 2

Calibration Date: 12/20/2020

Adapter: DSX-5000R (DSX-PLA004)

S/N: 4534040

Main: Versiv

S/N: 3089167

Software Version: V6.6 Build 2

Calibration Date: 12/20/2020

Adapter: DSX-5000 (DSX-PLA004)

S/N: 4534039



Cable ID: 003

Test Limit: TIA Cat 6 Channel

Limits Version: V7.6
Date / Time: 10/21/2021 11:26:36 AM
Operator: aymn abd mawgoud
Headroom 5.3 dB (NEXT 3.6-4.5)
Cable Type: Cat 6 U/UTP
NVP: 69.0%

Length (m), Limit 100.0	[Pair 7.8]	11.6
Prop. Delay (ns), Limit 555	[Pair 4.5]	61
Delay Skew (ns), Limit 50	[Pair 4.5]	5
Resistance (ohms)	[Pair 3.6]	2.08
Insertion Loss Margin (dB)	[Pair 3.6]	31.8
Frequency (MHz)	[Pair 3.6]	250.0
Limit (dB)	[Pair 3.6]	35.9

Worst Case Margin Worst Case Value

PASS	MAIN	SR
Worst Pair	3.6-4.5	3.6-4.5
NEXT (dB)	5.3	6.3
Limit (dB)	132.5	67.0
Freq. (MHz)	37.8	42.9
Worst Pair	4.5	3.6
PS NEXT (dB)	7.7	8.9
Freq. (MHz)	33.5	33.3
Limit (dB)	45.2	30.7

PASS	MAIN	SR
Worst Pair	3.6-4.5	3.6-4.5
ACR-F (dB)	11.2	13.3
Limit (dB)	234.0	243.5
Freq. (MHz)	8.5	76.8
Worst Pair	4.5	4.5
PS ACR-F (dB)	13.1	15.0
Freq. (MHz)	9.1	240.0
Limit (dB)	41.7	12.7

N/A	MAIN	SR
Worst Pair	3.6-4.5	3.6-4.5
ACR-N (dB)	12.2	39.0
Limit (dB)	243.5	41.1
Freq. (MHz)	8.4	234.5
Worst Pair	4.5	3.6
PS ACR-N (dB)	13.8	39.5
Freq. (MHz)	8.4	233.5
Limit (dB)	49.5	-3.8

PASS	MAIN	SR
Worst Pair	7.8	1.2
RL (dB)	8.2	9.3
Freq. (MHz)	182.0	179.5
Limit (dB)	9.4	9.5

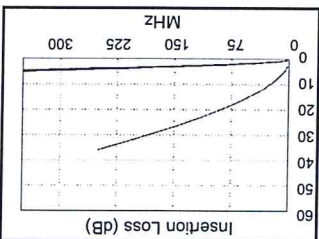
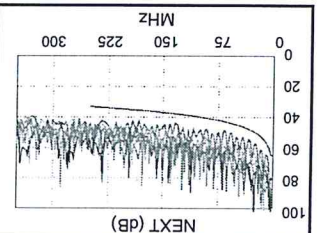
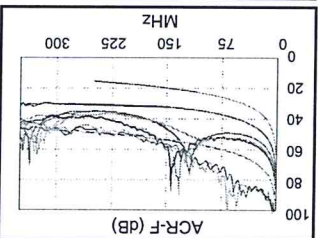
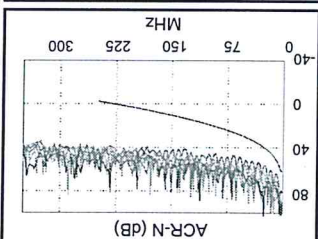
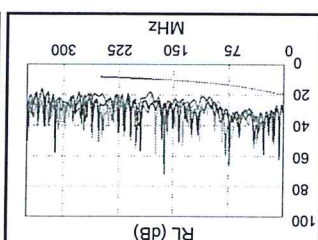
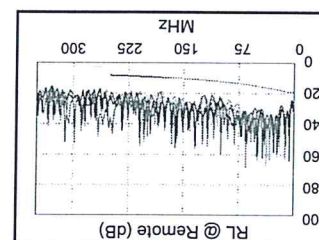
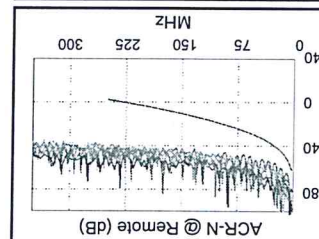
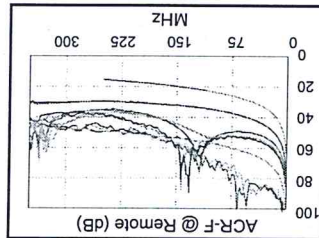
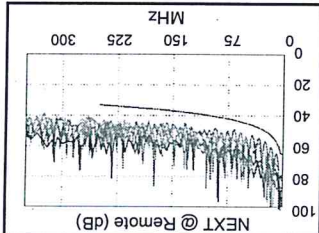
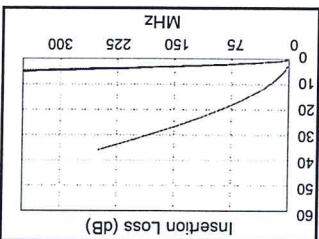
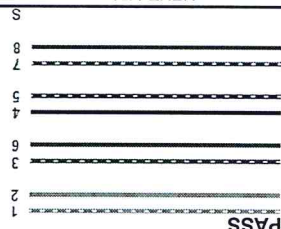
Compliant Network Standards:
10BASE-T
100BASE-T
100VG-AnyLAN
ATM-25
ATM-51
TR-4
2.5GBASE-T
100BASE-T4
5GBASE-T
ATM-155
TR-16 Active

100BASE-T4
5GBASE-T
ATM-155
TR-16 Active



11.6 m

Wire Map (T568B)



Test Summary: PASS
Remote: Versiv
S/N: 3057139
Software Version: V6.6 Build 2
Calibration Date: 12/20/2020
Adapter: DSX-5000R (DSX-PLA004)
S/N: 4534040

Main: Versiv
S/N: 3089167
Software Version: V6.6 Build 2
Calibration Date: 12/20/2020
Adapter: DSX-5000 (DSX-PLA004)
S/N: 4534039



Cable ID: 004

Test Limit: TIA Cat 6 Channel

Limits Version: V7.6

Date / Time: 10/21/2021 10:46:50 AM

Operator: aymn abd mawgoud

Headroom 6.3 dB (NEXT 1,2-4,5)

Cable Type: Cat 6 U/UTP

NVP: 69.0%

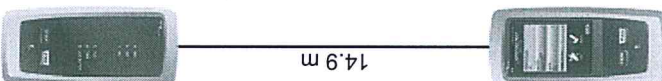
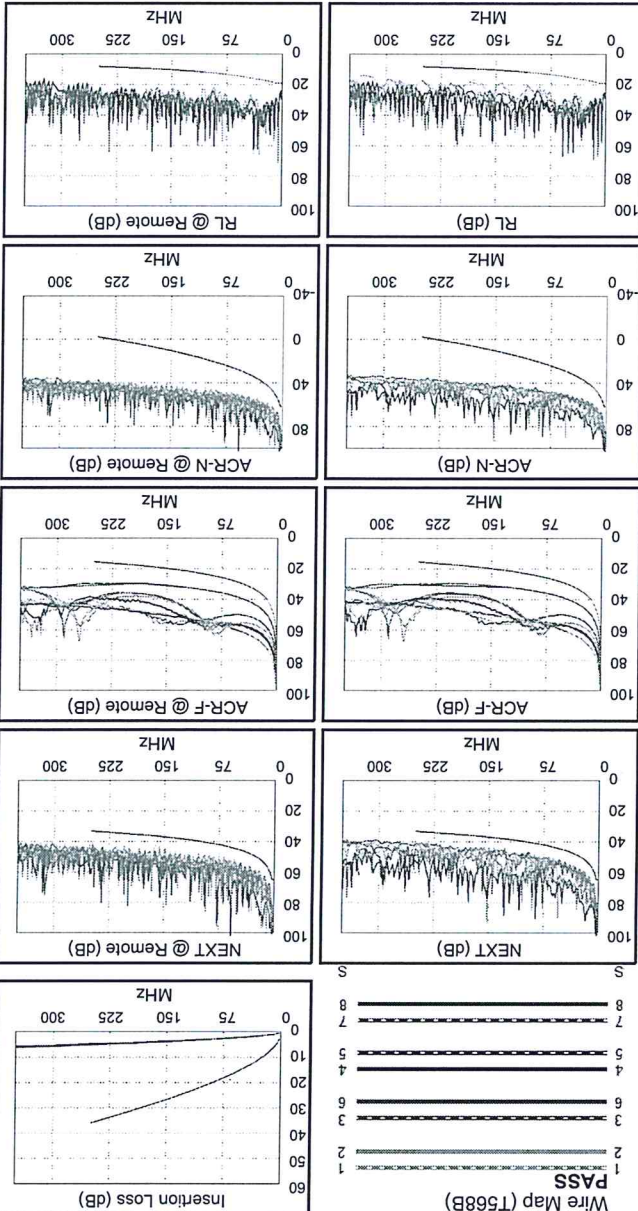
Length (m), Limit 100.0	[Pair 7,8]	14.9
Prop. Delay (ns), Limit 555	[Pair 4,5]	78
Delay Skew (ns), Limit 50	[Pair 4,5]	6
Resistance (ohms)	[Pair 4,5]	2.53

Insertion Loss Margin (dB)	[Pair 3,6]	30.8
Frequency (MHz)	[Pair 3,6]	249.0
Limit (dB)	[Pair 3,6]	35.9

Worst Case Margin Worst Case Value

PASS	MAIN	SR
Worst Pair	1,2-4,5	4,5-7,8
NEXT (dB)	6.3	7.8
Freq. (MHz)	243.0	68.0
Limit (dB)	33.3	42.8
Worst Pair	4,5	4,5
PS NEXT (dB)	6.0	7.9
Freq. (MHz)	96.0	20.1
Limit (dB)	37.4	48.9
PASS	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5
ACR-F (dB)	9.6	9.6
Freq. (MHz)	7.3	7.3
Limit (dB)	46.1	46.1
Worst Pair	4,5	4,5
PS ACR-F (dB)	11.8	11.8
Freq. (MHz)	7.3	7.3
Limit (dB)	43.1	43.1
N/A	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5
ACR-N (dB)	12.3	12.7
Freq. (MHz)	6.4	6.5
Limit (dB)	54.7	54.5
Worst Pair	4,5	4,5
PS ACR-N (dB)	12.7	13.1
Freq. (MHz)	6.5	6.5
Limit (dB)	52.0	52.0
PASS	MAIN	SR
Worst Pair	1,2	1,2
RL (dB)	8.5	10.2
Freq. (MHz)	142.5	106.5
Limit (dB)	10.5	11.7

Compliant Network Standards:
10BASE-T
100BASE-T
ATM-25
100VG-Anylan
TR-4
ATM-51
2.5GBASE-T
5GBASE-T
ATM-155
TR-16 Active
TR-16 Passive



Test Summary: PASS

Remote: Versiv

S/N: 3057139

Software Version: V6.6 Build 2

Calibration Date: 12/20/2020

Adapter: DSX-5000R (DSX-PLA004)

S/N: 4534039

Main: Versiv

S/N: 3089167

Software Version: V6.6 Build 2

Calibration Date: 12/20/2020

Adapter: DSX-5000 (DSX-PLA004)

S/N: 4534040



Cable ID: 005
Test Limit: TIA Cat 6 Channel

Limits Version: V7.6
Date / Time: 10/21/2021 10:49:14 AM
Operator: aymn abd mawgoud
Headroom 1.0 dB (NEXT 3.6-4.5)
Cable Type: Cat 6 U/UTP
NVP: 69.0%

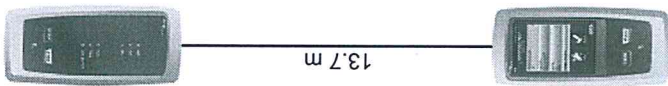
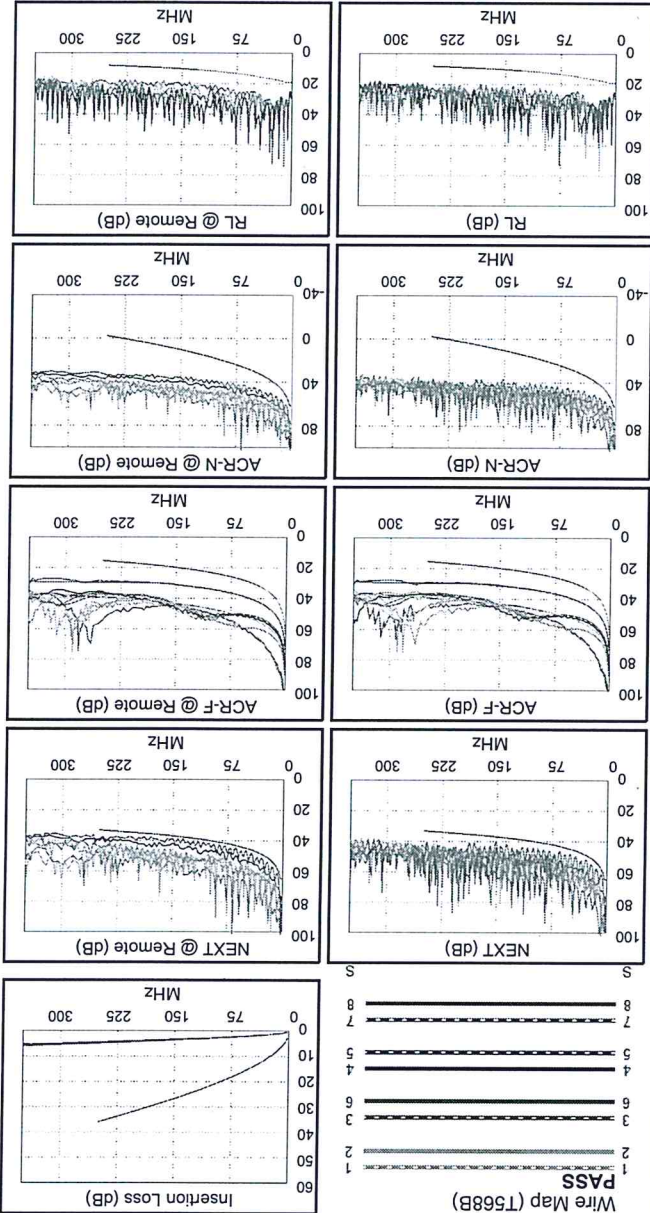
Length (m), Limit 100.0	[Pair 1,2]	13.7
Prop. Delay (ns), Limit 555	[Pair 4,5]	71
Delay Skew (ns), Limit 50	[Pair 4,5]	5
Resistance (ohms)	[Pair 4,5]	2.46
Insertion Loss Margin (dB)	[Pair 3,6]	31.2
Frequency (MHz)	[Pair 3,6]	250.0
Limit (dB)	[Pair 3,6]	35.9

Worst Case Margin Worst Case Value

PASS	MAIN	SR
Worst Pair	3.6-4.5	3.6-4.5
NEXT (dB)	3.0	1.0
Freq. (MHz)	28.6	136.0
Limit (dB)	49.1	37.7
Worst Pair	4.5	3.6
PS NEXT (dB)	5.3	8.3
Freq. (MHz)	50.3	136.5
Limit (dB)	42.2	34.7
PASS	MAIN	SR
Worst Pair	3.6-4.5	3.6-4.5
ACR-F (dB)	10.4	10.4
Freq. (MHz)	58.8	59.5
Limit (dB)	27.9	27.8
Worst Pair	4.5	3.6
PS ACR-F (dB)	12.8	12.8
Freq. (MHz)	12.8	12.8
Limit (dB)	250.0	250.0
PASS	MAIN	SR
Worst Pair	3.6-4.5	3.6-4.5
ACR-F (dB)	3.6-4.5	3.6-4.5
Freq. (MHz)	12.7	12.7
Limit (dB)	250.0	250.0
PASS	MAIN	SR
Worst Pair	3.6-4.5	3.6-4.5
ACR-N (dB)	7.8	7.4
Freq. (MHz)	39.2	30.5
Limit (dB)	246.0	208.0
PASS	MAIN	SR
Worst Pair	3.6-4.5	3.6-4.5
PS ACR-N (dB)	10.2	9.8
Freq. (MHz)	7.1	7.1
Limit (dB)	51.1	51.1
PASS	MAIN	SR
Worst Pair	1.2	3.6
RL (dB)	10.8	8.0
Freq. (MHz)	130.0	183.5
Limit (dB)	10.9	9.4

Compliant Network Standards:

100BASE-T
100BASE-T4
2.5GBASE-T
ATM-51
TR-4
100VG-AnyLan
TR-16 Passive



Test Summary: PASS
Remote: Versiv
S/N: 3057139
Software Version: V6.6 Build 2
Calibration Date: 12/20/2020
Adapter: DSX-5000R (DSX-PLA004)
S/N: 4534039

Main: Versiv
S/N: 3089167
Software Version: V6.6 Build 2
Calibration Date: 12/20/2020
Adapter: DSX-5000 (DSX-PLA004)
S/N: 4534040



Cable ID: 006

Test Limit: TIA Cat 6 Channel

Limits Version: V7.6

Date / Time: 10/21/2021 10:50:12 AM

Operator: aymn abd mawgoud

Headroom: 1.1 dB (NEXT 3.6-7.8)

Cable Type: Cat 6 U/UTP

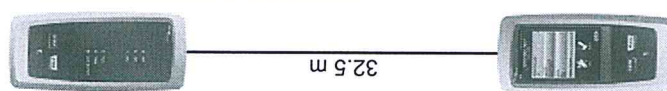
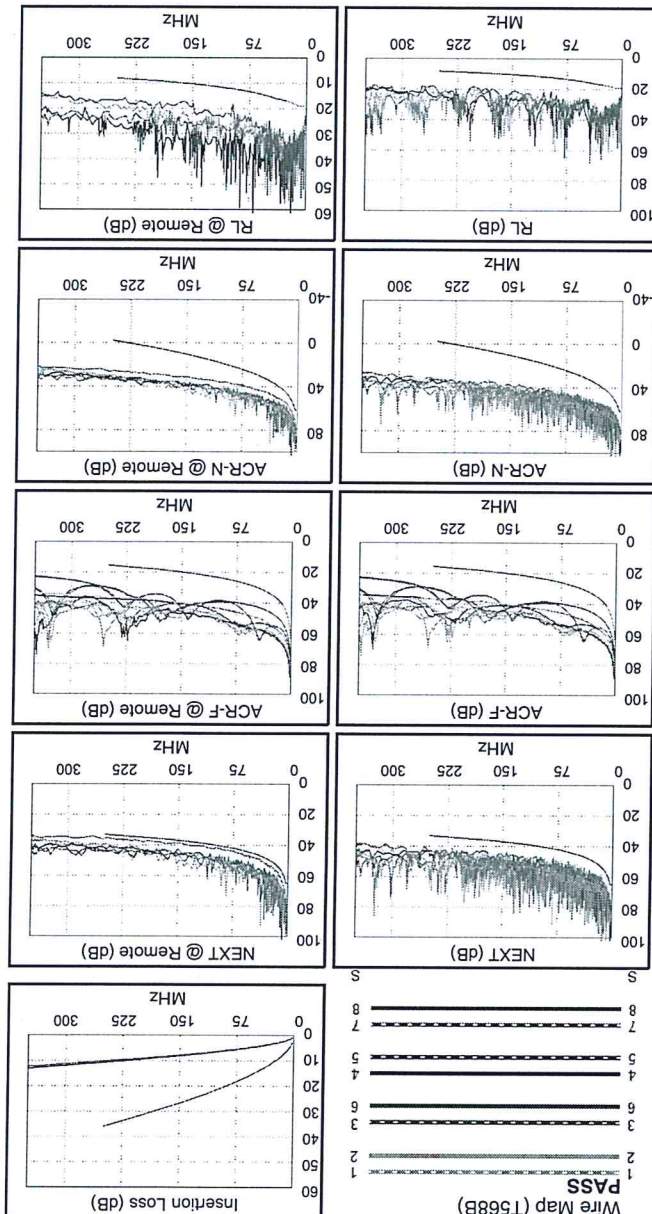
NVP: 69.0%

Length (m), Limit 100.0	[Pair 7.8]	32.5
Prop. Delay (ns), Limit 555	[Pair 4.5]	168
Delay Skew (ns), Limit 50	[Pair 4.5]	11
Resistance (ohms)	[Pair 3.6]	5.40
Insertion Loss Margin (dB)	[Pair 3.6]	25.3
Frequency (MHz)	[Pair 3.6]	250.0
Limit (dB)	[Pair 3.6]	35.9

Worst Case Margin Worst Case Value

PASS	MAIN	SR
Worst Pair	3.6-4.5	1.2-7.8
NEXT (dB)	5.9	7.6
Freq. (MHz)	105.0	229.5
Limit (dB)	39.6	33.8
Worst Pair	3.6	7.8
PS NEXT (dB)	6.4	2.5
Freq. (MHz)	14.8	92.5
Limit (dB)	51.2	37.7
PASS	MAIN	SR
Worst Pair	4.5-3.6	3.6-4.5
ACR-F (dB)	11.8	14.6
Freq. (MHz)	14.1	248.5
Limit (dB)	40.3	15.3
Worst Pair	4.5	4.5
PS ACR-F (dB)	13.2	16.4
Freq. (MHz)	3.1	250.0
Limit (dB)	50.4	48.5
N/A	MAIN	SR
Worst Pair	3.6-7.8	1.2-7.8
ACR-N (dB)	10.7	8.9
Freq. (MHz)	4.3	229.5
Limit (dB)	58.5	-0.4
Worst Pair	3.6	3.6
PS ACR-N (dB)	11.6	10.1
Freq. (MHz)	3.3	247.5
Limit (dB)	58.4	43.7
PASS	MAIN	SR
Worst Pair	7.8	7.8
RL (dB)	9.1	6.5
Freq. (MHz)	205.0	97.0
Limit (dB)	8.9	12.1

Compliant Network Standards:
100BASE-T
100BASE-TX
2.5GBASE-T
ATM-51
TR-4
TR-16 Passive
100VG-AnyLan
ATM-25
ATM-155
5GBASE-T
100BASE-T4
TR-16 Active



Test Summary: PASS

Remote: Versiv
S/N: 3057139
Software Version: V6.6 Build 2
Calibration Date: 12/20/2020
Adapter: DSX-5000R (DSX-PLA004)
S/N: 4534039

Main: Versiv
S/N: 3089167
Software Version: V6.6 Build 2
Calibration Date: 12/20/2020
Adapter: DSX-5000 (DSX-PLA004)
S/N: 4534040



Test Summary: PASS

Remote: Versiv
S/N: 3057139
Software Version: V6.6 Build 2
Calibration Date: 12/20/2020
Adapter: DSX-5000R (DSX-PLA004)
S/N: 4534039

Main: Versiv
S/N: 3089167
Software Version: V6.6 Build 2
Calibration Date: 12/20/2020
Adapter: DSX-5000 (DSX-PLA004)
S/N: 4534040

Cable ID: 007
Test Limit: TIA Cat 6 Channel
Limits Version: V7.6
Date / Time: 10/21/2021 10:51:02 AM
Operator: aymn abd mawgoud
Headroom 4.9 dB (NEXT 3,6-4,5)
Cable Type: Cat 6 U/UTP
NVP: 69.0%

Length (m), Limit 100.0	[Pair 7,8]	23.2
Prop. Delay (ns), Limit 555	[Pair 4,5]	121
Delay Skew (ns), Limit 50	[Pair 4,5]	9
Resistance (ohms)	[Pair 4,5]	3.90
Insertion Loss Margin (dB)	[Pair 3,6]	28.2
Frequency (MHz)	[Pair 3,6]	250.0
Limit (dB)	[Pair 3,6]	35.9

Worst Case Margin Worst Case Value

PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	3,6-4,5	3,6-4,5
NEXT (dB)	4.9	5.5	5.7	8.2
Freq. (MHz)	96.8	25.1	185.0	250.0
Limit (dB)	40.2	50.0	35.4	33.1
Worst Pair	3,6	4,5	3,6	7,8
PS NEXT (dB)	7.0	6.9	9.4	7.9
Freq. (MHz)	96.8	134.5	248.0	250.0
Limit (dB)	37.3	34.9	30.2	30.2

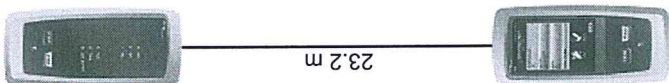
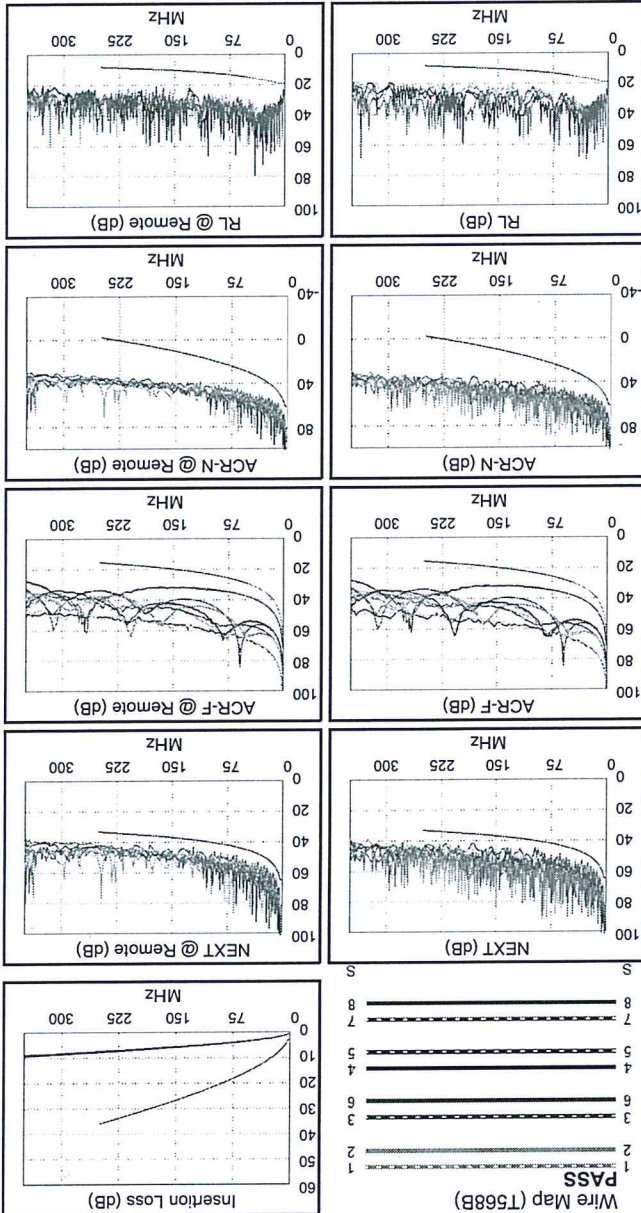
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	3,6-4,5	3,6-4,5
ACR-F (dB)	8.1	8.1	12.2	12.4
Freq. (MHz)	30.5	24.0	161.0	165.0
Limit (dB)	33.6	35.7	19.1	18.9
Worst Pair	3,6	3,6	3,6	4,5
PS ACR-F (dB)	10.7	10.7	14.7	13.5
Freq. (MHz)	8.4	7.5	161.0	141.5
Limit (dB)	41.8	42.8	16.1	17.2

N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	3,6-4,5	3,6-4,5
ACR-N (dB)	10.7	10.8	36.4	36.8
Freq. (MHz)	4.4	248.0	2.6	-2.7
Limit (dB)	58.2	58.0	4.5	3.6
Worst Pair	4,5	4,5	3,6	3,6
PS ACR-N (dB)	12.2	12.1	37.5	36.6
Freq. (MHz)	4.4	4.4	248.0	248.0
Limit (dB)	55.7	55.7	-5.6	-5.6

PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2	1,2	1,2	1,2
RL (dB)	10.1	10.1	11.0	10.1
Freq. (MHz)	130.5	130.0	212.5	130.0
Limit (dB)	10.8	10.9	8.7	10.9

Compliant Network Standards:

100BASE-T
100BASE-TX
2.5GBASE-T
ATM-51
TR-4
100VG-AnyLAN
TR-16 Passive
TR-16 Active



Cable ID: 008

Test Limit: TIA Cat 6 Channel

Limits Version: V7.6

Date / Time: 10/21/2021 11:04:38 AM

Operator: aymn abd mawgoud

Headroom 6.2 dB (NEXT 4,5-7,8)

Cable Type: Cat 6 U/UTP

NVP: 69.0%

Length (m), Limit 100.0
[Pair 7,8] 29.2
Prop. Delay (ns), Limit 555
[Pair 4,5] 152
Delay Skew (ns), Limit 50
[Pair 4,5] 11
Resistance (ohms)
[Pair 4,5] 4.91

Insertion Loss Margin (dB)
[Pair 3,6] 26.2
Frequency (MHz)
[Pair 3,6] 250.0
Limit (dB)
[Pair 3,6] 35.9

Worst Case Margin Worst Case Value

PASS	MAIN	SR	MAIN	SR
Worst Pair	4,5-7,8	3,6-4,5	3,6-4,5	4,5-7,8
NEXT (dB)	6.2	7.8	6.2	10.5
Freq. (MHz)	243.5	43.3	243.5	33.3
Limit (dB)	33.3	46.1	33.3	33.3
Worst Pair	4,5	4,5	4,5	3,6
PS NEXT (dB)	7.4	8.9	8.2	11.2
Freq. (MHz)	113.0	59.8	243.5	30.6
Limit (dB)	36.2	40.9	30.4	30.6

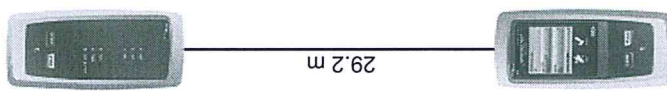
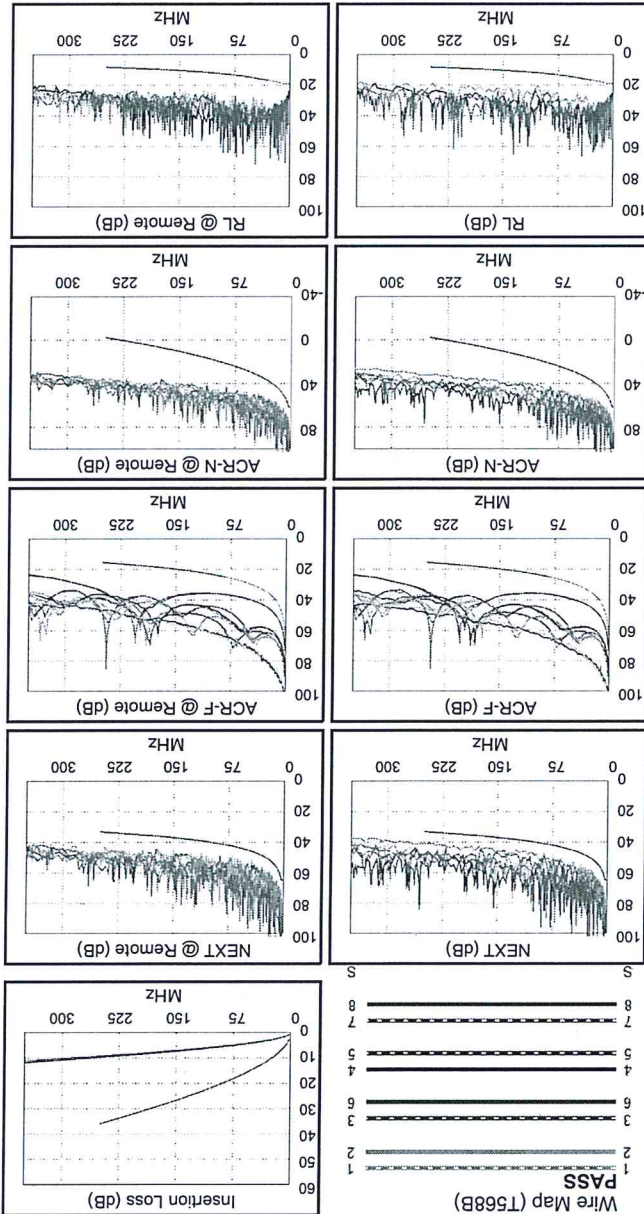
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	3,6-4,5	4,5-7,8
ACR-F (dB)	7.0	9.5	18.6	18.5
Freq. (MHz)	250.0	19.5	250.0	15.3
Limit (dB)	46.4	37.5	15.3	15.3
Worst Pair	3,6	3,6	3,6	3,6
PS ACR-F (dB)	12.1	12.2	19.7	18.9
Freq. (MHz)	250.0	7.3	250.0	12.3
Limit (dB)	47.0	43.1	12.3	12.3

N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	4,5-7,8	4,5-7,8
ACR-N (dB)	12.9	12.5	32.6	36.9
Freq. (MHz)	243.5	3.3	243.5	36.9
Limit (dB)	54.3	60.9	-2.1	-2.1
Worst Pair	4,5	4,5	4,5	3,6
PS ACR-N (dB)	13.9	14.6	34.1	36.5
Freq. (MHz)	6.4	3.3	243.5	234.5
Limit (dB)	52.2	58.4	-5.0	-4.0

PASS	MAIN	SR	MAIN	SR
Worst Pair	MAIN	SR	MAIN	SR
RL (dB)	8.6	13.2	10.2	14.6
Freq. (MHz)	103.0	49.5	246.0	213.0
Limit (dB)	11.9	15.1	8.1	8.7

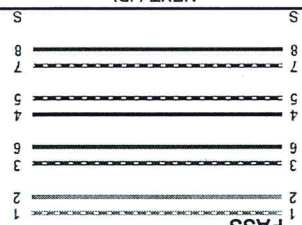
Compliant Network Standards:
100BASE-T4
100BASE-TX
2.5GBASE-T
5GBASE-T
ATM-155
ATM-51
TR-4
100VG-AnyLAN
TR-16 Passive

100BASE-T4
5GBASE-T
ATM-155
TR-16 Active



29.2 m

Wire Map (T568B)



Test Summary: PASS

Remote: Versiv

S/N: 3057139

Software Version: V6.6 Build 2

Calibration Date: 12/20/2020

Adapter: DSX-5000R (DSX-PLA004)

S/N: 4534040

Main: Versiv

S/N: 3089167

Software Version: V6.6 Build 2

Calibration Date: 12/20/2020

Adapter: DSX-5000 (DSX-PLA004)

S/N: 4534039

Cable ID: 009

Test Limit: T1A Cat 6 Channel

Limit: Version: V7.6

Date / Time: 10/21/2021 11:05:02 AM

Operator: aymn abd mawgoud
Headroom 3.2 dB (NEXT 4.5-7.8)

Cable Type: Cat 6 U/UTP

NVP: 69.0%

Length (m), Limit 100.0	[Pair 1,2]	31.0
Prop. Delay (ns), Limit 555	[Pair 4,5]	161
Delay Skew (ns), Limit 50	[Pair 4,5]	11
Resistance (ohms)	[Pair 3,6]	5.11

Insertion Loss Margin (dB)	[Pair 3,6]	25.7
Frequency (MHz)	[Pair 3,6]	250.0
Limit (dB)	[Pair 3,6]	35.9

Worst Case Margin Worst Case Value

PASS	MAIN	SR
Worst Pair	4.5-7.8	1.2-3.6
NEXT (dB)	3.2	4.2
Freq. (MHz)	87.8	191.0
Limit (dB)	33.4	33.2
Worst Pair	4.5	4.5
PS NEXT (dB)	5.3	6.3
Freq. (MHz)	113.5	202.0
Limit (dB)	30.4	30.3

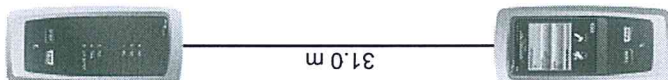
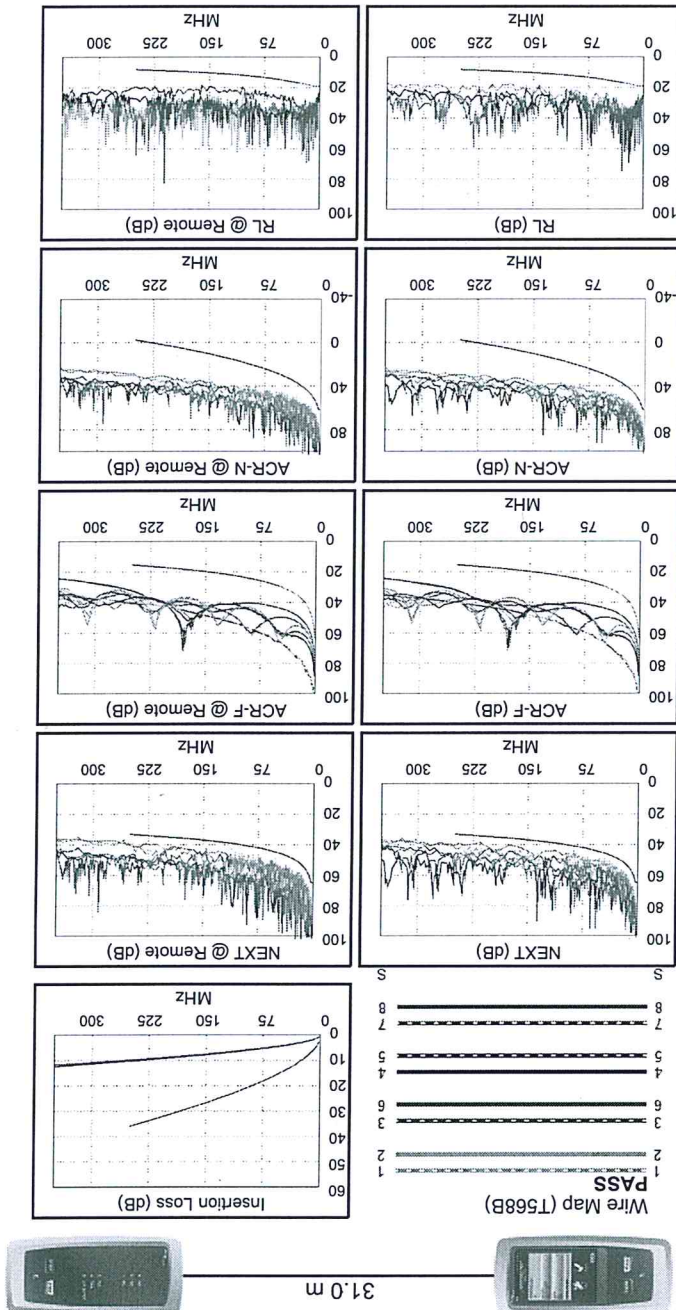
PASS	MAIN	SR
Worst Pair	3.6-4.5	4.5-3.6
ACR-F (dB)	13.2	16.7
Freq. (MHz)	15.1	22.4
Limit (dB)	39.7	36.3
Worst Pair	4.5	4.5
PS ACR-F (dB)	14.1	17.2
Freq. (MHz)	2.9	3.5
Limit (dB)	51.1	49.4

N/A	MAIN	SR
Worst Pair	4.5-7.8	4.5-7.8
ACR-N (dB)	11.2	11.6
Freq. (MHz)	6.0	6.3
Limit (dB)	55.3	54.9
Worst Pair	4.5	4.5
PS ACR-N (dB)	12.1	12.6
Freq. (MHz)	12.5	12.5
Limit (dB)	45.3	45.3

PASS	MAIN	SR
Worst Pair	1.2	7.8
RL (dB)	7.9	7.2
Freq. (MHz)	141.0	106.0
Limit (dB)	10.5	11.7

Compliant Network Standards:
100BASE-T
100BASE-TX
2.5GBASE-T
ATM-51
TR-4
100VG-Anylan
TR-16 Passive

100BASE-T4
5GBASE-T
ATM-155
TR-16 Active



Test Summary: PASS

Remote: Versiv

S/N: 3057139

Software Version: V6.6 Build 2

Calibration Date: 12/20/2020

Adapter: DSX-5000R (DSX-PLA004)

S/N: 4534040

Main: Versiv

S/N: 3089167

Software Version: V6.6 Build 2

Calibration Date: 12/20/2020

Adapter: DSX-5000 (DSX-PLA004)

S/N: 4534039

Cable ID: 010

Test Limit: T1A Cat 6 Channel

Limits Version: V7.6

Date / Time: 10/21/2021 11:10:56 AM

Operator: aymn abd mawgoud

Headroom 5.3 dB (NEXT 3.6-4.5)

Cable Type: Cat 6 U/UTP

NVP: 69.0%

Length (m), Limit 100.0	[Pair 7.8]	32.3
Prop. Delay (ns), Limit 555	[Pair 4.5]	168
Delay Skew (ns), Limit 50	[Pair 4.5]	12
Resistance (ohms)	[Pair 4.5]	5.34
Insertion Loss Margin (dB)	[Pair 3.6]	25.3
Frequency (MHz)	[Pair 3.6]	250.0
Limit (dB)	[Pair 3.6]	35.9

Worst Case Margin Worst Case Value

PASS	MAIN	SR	MAIN	SR
Worst Pair	3.6-4.5	3.6-4.5	3.6-4.5	3.6-4.5
NEXT (dB)	5.3	6.0	5.8	8.9
Freq. (MHz)	51.3	11.9	226.5	230.7
Limit (dB)	44.8	55.4	33.9	33.7
Worst Pair	3.6	4.5	3.6	1.2
PS NEXT (dB)	7.2	7.8	8.1	9.7
Freq. (MHz)	51.3	51.3	226.5	242.0
Limit (dB)	42.1	42.1	30.9	30.4

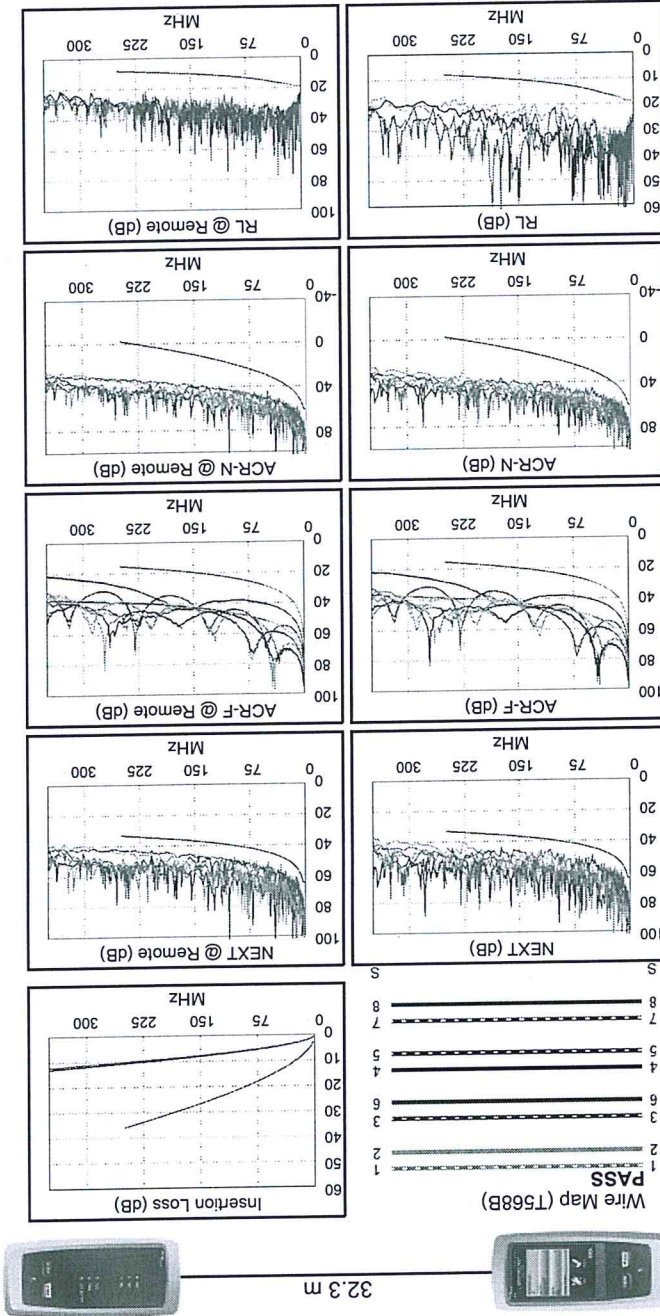
PASS	MAIN	SR	MAIN	SR
Worst Pair	3.6-4.5	3.6-4.5	3.6-4.5	3.6-4.5
ACR-F (dB)	10.6	10.6	12.9	12.9
Freq. (MHz)	8.5	14.8	249.0	249.0
Limit (dB)	44.7	39.9	15.3	15.3
Worst Pair	4.5	4.5	4.5	4.5
PS ACR-F (dB)	12.6	12.7	15.1	14.9
Freq. (MHz)	3.1	11.9	250.0	249.0
Limit (dB)	50.4	38.8	12.3	12.3

N/A	MAIN	SR	MAIN	SR
Worst Pair	3.6-4.5	3.6-4.5	1.2-3.6	1.2-3.6
ACR-N (dB)	10.8	10.9	29.8	34.1
Freq. (MHz)	12.0	11.9	226.5	242.0
Limit (dB)	48.3	48.4	-0.1	-1.9
Worst Pair	4.5	4.5	3.6	1.2
PS ACR-N (dB)	12.7	12.4	32.0	34.7
Freq. (MHz)	3.3	3.3	226.5	242.0
Limit (dB)	58.4	58.4	-3.0	-4.9

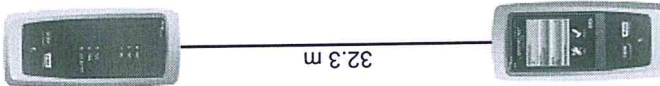
PASS	MAIN	SR	MAIN	SR
Worst Pair	1.2	1.2	1.2	7.8
RL (dB)	6.8	12.7	9.5	14.7
Freq. (MHz)	93.0	93.3	235.5	211.0
Limit (dB)	12.3	12.3	8.3	8.8

Compliant Network Standards:
100BASE-T
1000BASE-T
2.5GBASE-T
ATM-51
TR-4
100VG-Anylan
TR-16 Passive

Project: ENPPI AGROOD-30
Agrood 30.fhw



Wire Map (T568B)



Test Summary: PASS

Remote: Versiv
S/N: 3057139

Software Version: V6.6 Build 2

Calibration Date: 12/20/2020

Adapter: DSX-5000R (DSX-PLA004)

S/N: 4534040

Main: Versiv

S/N: 3089167

Software Version: V6.6 Build 2

Calibration Date: 12/20/2020

Adapter: DSX-5000 (DSX-PLA004)

S/N: 4534039

Cable ID: 011

Test Limit: TIA Cat 6 Channel

Limit Version: V7.6

Date / Time: 10/21/2021 11:11:18 AM

Operator: aymn abd mawgoud

Headroom 5.7 dB (NEXT 4.5-7.8)

Cable Type: Cat 6 U/UTP

NVP: 69.0%

Length (m), Limit 100.0	[Pair 7,8]	25.2
Prop. Delay (ns), Limit 555	[Pair 4,5]	132
Delay Skew (ns), Limit 50	[Pair 4,5]	10
Resistance (ohms)	[Pair 3,6]	4.25
Insertion Loss Margin (dB)	[Pair 3,6]	27.5
Frequency (MHz)	[Pair 3,6]	250.0
Limit (dB)	[Pair 3,6]	35.9

Worst Case Margin Worst Case Value

PASS	MAIN	SR
Worst Pair	4.5-7.8	4.5-7.8
NEXT (dB)	5.7	6.8
Freq. (MHz)	215.5	215.5
Limit (dB)	34.2	34.2
Worst Pair	4.5	3.6
PS NEXT (dB)	7.3	8.3
Freq. (MHz)	131.0	215.5
Limit (dB)	31.3	31.3

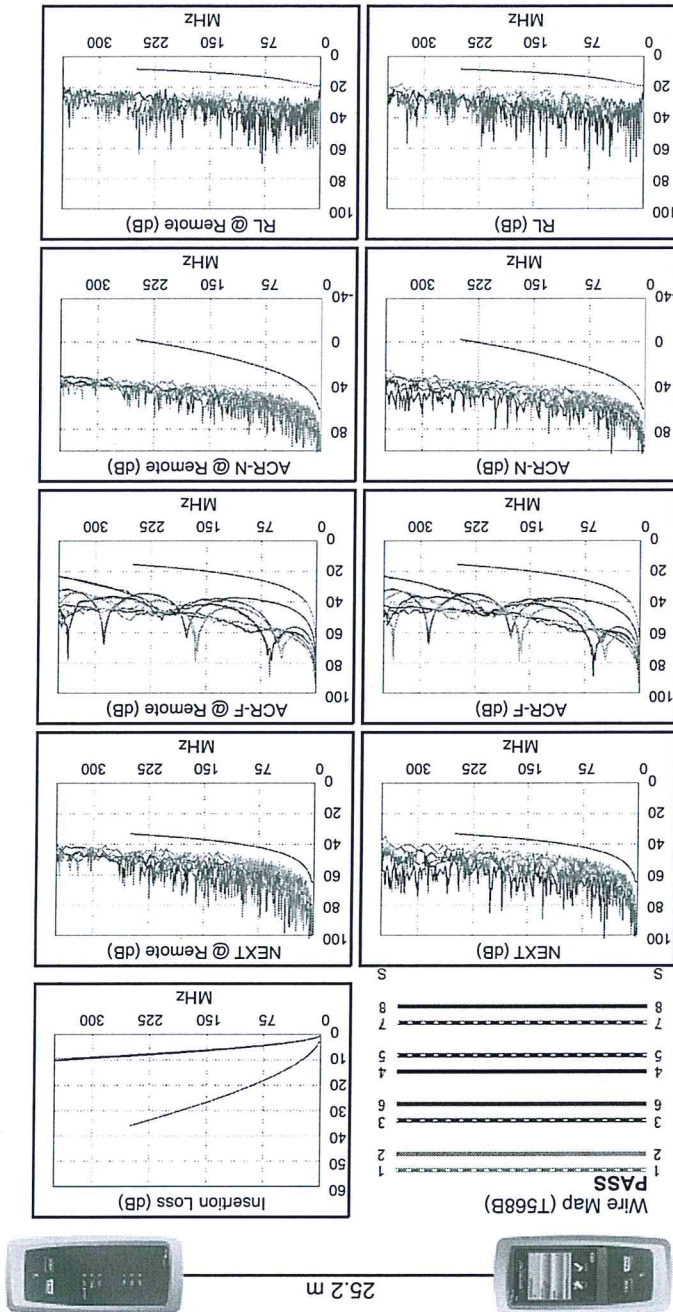
PASS	MAIN	SR
Worst Pair	4.5-3.6	3.6-4.5
NEXT (dB)	11.6	18.2
Freq. (MHz)	18.6	237.0
Limit (dB)	37.9	15.8
Worst Pair	4.5	4.5
PS ACR-F (dB)	13.7	19.5
Freq. (MHz)	8.1	240.5
Limit (dB)	49.4	12.6

N/A	MAIN	SR
Worst Pair	4.5-7.8	4.5-7.8
ACR-N (dB)	13.2	31.3
Freq. (MHz)	15.9	215.5
Limit (dB)	45.3	1.3
Worst Pair	4.5	4.5
PS ACR-N (dB)	13.6	32.6
Freq. (MHz)	7.6	215.5
Limit (dB)	50.4	-1.7

PASS	MAIN	SR
Worst Pair	1.2	7.8
RL (dB)	10.7	11.3
Freq. (MHz)	108.0	211.5
Limit (dB)	11.7	8.7

Compliant Network Standards:
10BASE-T
100BASE-TX
2.5GBASE-T
ATM-51
TR-4
100VG-AnyLAN
TR-16 Passive

100BASE-T4
5GBASE-T
ATM-155
TR-16 Active



Test Summary: PASS

Remote: Versiv

S/N: 3057139

Software Version: V6.6 Build 2

Calibration Date: 12/20/2020

Adapter: DSX-5000R (DSX-PLA004)

S/N: 4534040

Main: Versiv

S/N: 3089167

Software Version: V6.6 Build 2

Calibration Date: 12/20/2020

Adapter: DSX-5000 (DSX-PLA004)

S/N: 4534039



Test Summary: PASS

Remote: Versiv
S/N: 3057139
Software Version: V6.6 Build 2
Calibration Date: 12/20/2020
Adapter: DSX-5000R (DSX-PLA004)
S/N: 4534040

Main: Versiv
S/N: 3089167
Software Version: V6.6 Build 2
Calibration Date: 12/20/2020
Adapter: DSX-5000 (DSX-PLA004)
S/N: 4534039

Cable ID: 012
Test Limit: TIA Cat 6 Channel
Limits Version: V7.6
Date / Time: 10/21/2021 11:14:16 AM
Operator: aymn abd mawgoud
Headroom 6.2 dB (NEXT 3,6-4,5)
Cable Type: Cat 6 U/UTP
NVP: 69.0%

Length (m), Limit 100.0	[Pair 7,8]	25.4
Prop. Delay (ns), Limit 555	[Pair 4,5]	132
Delay Skew (ns), Limit 50	[Pair 4,5]	9
Resistance (ohms)	[Pair 4,5]	4.22
Insertion Loss Margin (dB)	[Pair 3,6]	27.5
Frequency (MHz)	[Pair 3,6]	250.0
Limit (dB)	[Pair 3,6]	35.9

Worst Case Margin Worst Case Value

PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	1,2-3,6	4,5-1,2
NEXT (dB)	7.9	6.2	8.7	8.2
Freq. (MHz)	208.0	153.5	250.0	242.5
Limit (dB)	34.5	36.8	33.1	33.3
Worst Pair	4,5	3,6	3,6	3,6
PS NEXT (dB)	8.6	7.8	9.9	8.6
Freq. (MHz)	208.0	145.5	249.5	250.0
Limit (dB)	31.6	34.3	30.2	30.2

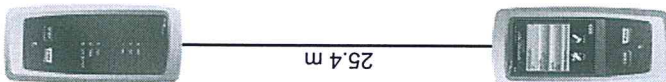
PASS	MAIN	SR	MAIN	SR
Worst Pair	4,5-3,6	3,6-4,5	1,2-4,5	4,5-1,2
ACR-F (dB)	10.1	17.6	17.7	17.0
Freq. (MHz)	22.4	14.6	240.0	240.0
Limit (dB)	36.3	40.0	15.7	15.7
Worst Pair	4,5	4,5	4,5	4,5
PS ACR-F (dB)	12.4	12.5	18.1	18.9
Freq. (MHz)	14.6	14.6	240.0	233.0
Limit (dB)	57.5	37.0	12.7	12.9

N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	1,2-3,6	3,6-4,5
ACR-N (dB)	11.7	11.8	36.2	35.3
Freq. (MHz)	4.1	4.3	250.0	242.5
Limit (dB)	58.7	58.5	-2.8	-2.0
Worst Pair	4,5	4,5	3,6	3,6
PS ACR-N (dB)	13.8	14.0	37.4	36.2
Freq. (MHz)	4.1	4.3	249.5	250.0
Limit (dB)	56.2	56.0	-5.7	-5.8

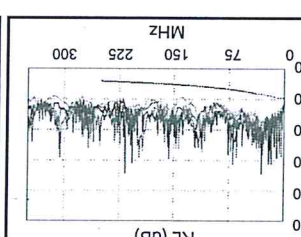
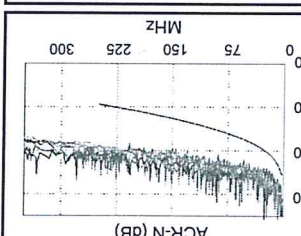
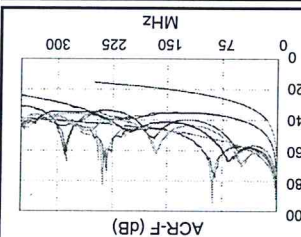
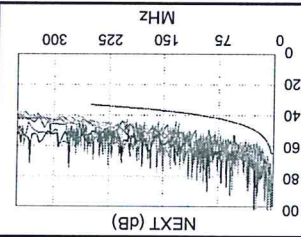
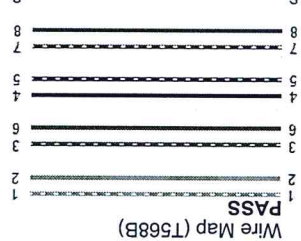
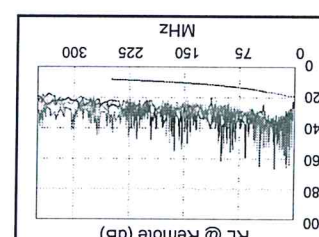
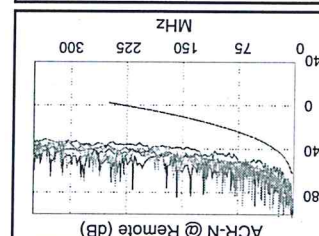
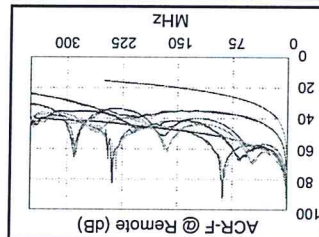
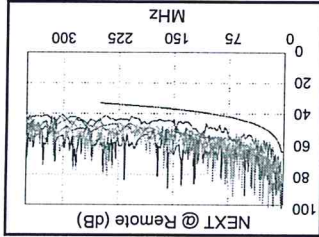
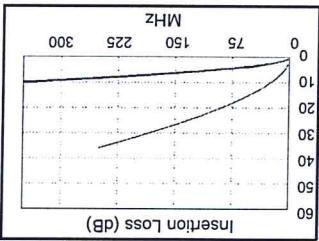
PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2	4,5	1,2	7,8
RL (dB)	7.9	10.0	7.9	12.9
Freq. (MHz)	139.5	43.0	139.5	245.5
Limit (dB)	10.6	15.7	10.6	8.1

Compliant Network Standards:
10BASE-T
100BASE-T
100BASE-TX
2.5GBASE-T
ATM-51
TR-4
TR-16 Passive
100VG-AnyLAN
ATM-25
ATM-155



100BASE-T4
5GBASE-T
ATM-155
TR-16 Active



Wire Map (T568B)



12.10- Electrical Pre-Commissioning Check Lists

System ID	030-TE-001
System Description	Integrated Voice & Data System
<div data-bbox="1117 1946 1396 2031"> Enppi PETROJET</div> <div data-bbox="518 1942 1023 2002">Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div> <div data-bbox="245 1917 442 2002"> المملكة العربية السعودية وزارة النفط</div>	

PRE-COMMISSIONING CHECK LIST

LOW VOLTAGE CABLES

EL-30 A

PROJECT TITLE : EGPC CRUDE OIL TANK FARM - AGROOD AREA (MODULE 1)	
PROJECT NUMBER : 1251-100	DISCIPLINE : Electrical
SYSTEM NAME : Integrated Voice & Data System	SYSTEM ID : 030-TE-001
SUB-SYSTEM NAME : Integrated Voice & Data System	SUB-SYSTEM ID : 030-TE-001
ITEM TAG No. : P-030-FIT-007	AREA : 30
REF. DWGS/DOCS :	

No.	DESCRIPTION	RESULT	OK/NA/PL	ITEM No.
		PL		
1	Construction punch list to be checked.	✓		
2	Check cables are correctly fixed to trays and supports.	✓		
3	Check cables through walls or ceilings are correctly sealed.	✓		
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓		
5	Check identification tags of all conductors and wires.	✓		
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓		
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓		
8	Check that the bending radius of cables is not less than the minimum established.	✓		
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓		
10	Tie wraps to be used for cable and wires fixation.	✓		
11	Cable connections shall be torque tested.	✓		

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

PRE-COMMISSIONING CHECK LIST

LOW VOLTAGE CABLES

EL-30 A

PROJECT TITLE : EGPC CRUDE OIL TANK FARM - AGROOD AREA (MODULE 1)		PROJECT NUMBER : 1251-100		DISCIPLINE : Electrical		SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001		SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001		ITEM TAG No. : P-030-Fit-007		AREA : 30		REF. DWGS/DOCS :	
---	--	---------------------------	--	-------------------------	--	--	--	------------------------	--	--	--	----------------------------	--	------------------------------	--	-----------	--	------------------	--

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	N/A	
13	Trench markers to be checked w.r.t approved documents.	N/A	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	—	
15	Inspect cable laid in trenches, segregation and protection.	N/A	
16	Cables to be tested (continuity/insulation resistance). (*)	—	
17	Equipment test report and inspection certificate to be checked.	—	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	—	
19	Calibration test certificate of testing equipment to be checked.	—	
REMARKS AND OBSERVATIONS :			
(*) Refer to table (III).			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

PRE-COMMISSIONING CHECK LIST LOW VOLTAGE CABLES EL-30 A

PROJECT TITLE : EGPC CRUDE OIL TANK FARM - AGROOD AREA (MODULE 1)	
PROJECT NUMBER : 1251-100	DISCIPLINE : Electrical
SYSTEM NAME : Integrated Voice & Data System	
SUB-SYSTEM NAME : Integrated Voice & Data System	
SYSTEM ID : 030-TE-001	SUB-SYSTEM ID : 030-TE-001
ITEM TAG No. : P-030-FIT-008	AREA : 30
REF. DWGS/DOCS :	

No.	DESCRIPTION	RESULT	OK/NA/PL	ITEM No.
		PL		

1	Construction punch list to be checked.			
2	Check cables are correctly fixed to trays and supports.			
3	Check cables through walls or ceilings are correctly sealed.			
4	Check that all cables (power/control) are installed in accordance with cable lists and approved documents.			
5	Check identification tags of all conductors and wires.			
6	Check connection, tightness, termination and joints of cables are correctly executed.			
7	Check where conductors have been terminated using crimping lugs; ensure the correct size and type of crimping lugs.			
8	Check that the bending radius of cables is not less than the minimum established.			
9	Cable markers to be installed before covering buried cables or cables in cable trays.			
10	Tie wraps to be used for cable and wires fixation.			
11	Cable connections shall be torque tested.			

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

PRE-COMMISSIONING CHECK LIST			
LOW VOLTAGE CABLES			
EL-30 A			
PROJECT TITLE : EGPC CRUDE OIL TANK FARM - AGROOD AREA (MODULE 1)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Electrical	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : P-30-fit-008		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION	RESULT	PL
ITEM No.	OK/NA/PL	ITEM No.	
12	Check that buried cables are correctly covered and protected.	N/A	
13	Trench markers to be checked w.r.t approved documents.	N/A	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	/	
15	Inspect cable laid in trenches, segregation and protection.	N/A	
16	Cables to be tested (continuity/insulation resistance). (*)	/	
17	Equipment test report and inspection certificate to be checked.	/	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	/	
19	Calibration test certificate of testing equipment to be checked.	/	
REMARKS AND OBSERVATIONS :			
(*) Refer to table (III).			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

10000-Z-000-EK7-TMP-0014 (03/14)

PRE-COMMISSIONING CHECK LIST LOW VOLTAGE CABLES EL-30 A

PROJECT TITLE : EGPC CRUDE OIL TANK FARM - AGROOD AREA (MODULE 1)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Integrated Voice & Data System

SYSTEM ID : 030-TE-001

SUB-SYSTEM NAME : Integrated Voice & Data System

SUB-SYSTEM ID : 030-TE-001

ITEM TAG No. : P-030-FIT-009


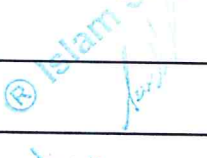

AREA : 30

REF. DWGs/DOCs :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	—	
2	Check cables are correctly fixed to trays and supports.	—	
3	Check cables through walls or ceilings are correctly sealed.	—	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	—	
5	Check identification tags of all conductors and wires.	—	
6	Check connection, tightness, termination and joints of cables are correctly executed.	—	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	—	
8	Check that the bending radius of cables is not less than the minimum established.	—	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	—	
10	Tie wraps to be used for cable and wires fixation.	—	
11	Cable connections shall be torque tested.	—	

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

PRE-COMMISSIONING CHECK LIST LOW VOLTAGE CABLES EL-30 A

PROJECT TITLE : EGPC CRUDE OIL TANK FARM - AGROOD AREA (MODULE 1)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Integrated Voice & Data System

SYSTEM ID : 030-TE-001

SUB-SYSTEM NAME : Integrated Voice & Data System

SUB-SYSTEM ID : 030-TE-001

ITEM TAG No. : P-030-Fit-009

AREA : 30

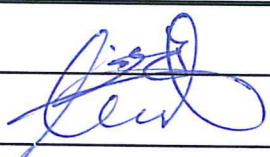
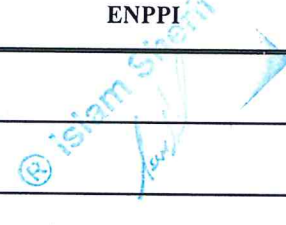

REF. DWGs/DOCs :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	N/A	
13	Trench markers to be checked w.r.t approved documents.	N/A	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	—	
15	Inspect cable laid in trenches, segregation and protection.	N/A	
16	Cables to be tested (continuity/insulation resistance). (*)	—	
17	Equipment test report and inspection certificate to be-checked.	—	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	—	
19	Calibration test certificate of testing equipment to be checked.	—	

REMARKS AND OBSERVATIONS :

(*) Refer to table (III).

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

PRE-COMMISSIONING CHECK LIST TELECOMMUNICATION CABLES TE-07 A


PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)	
PROJECT NUMBER : 1251-100	DISCIPLINE : Telecommunication
SYSTEM NAME : Integrated Voice & Data System	SYSTEM ID : 030-TE-001
SUB-SYSTEM NAME : Integrated Voice & Data System	SUB-SYSTEM ID : 030-TE-001
ITEM TAG No. : VD-TEL-030-03	AREA : 30
REF. DWGS/DOCS :	

No.	DESCRIPTION	RESULT	OK/NA/PL	ITEM No.
		PL		
1	All cables are terminated correctly as per the wiring Dwg and correctly fitted.		✓	
2	Carry out insulation resistance and continuity check.		✓	
3	Carry out Meggering check.		✓	
4	Cable tags are placed correctly (at both ends) and reflect the correct cable tag.		✓	
5	No Bending radius violation for the cables.		✓	
6	Check Earthing/grounding in accordance with specification.		✓	
7	Cable screen correctly connected to its corresponding earthing bar.		✓	
8	Check Cable type and model number as mentioned in the drawings/purchase order.		✓	
9	Glanding / Locknuts are correctly made.		✓	
10	Check that spare length exist at both ends of the cable.		✓	
11	Check cable installation conforms to drawings.		✓	

REMARKS AND OBSERVATIONS :

All cables tags must be installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

PAGE 1 OF 1

PRE-COMMISSIONING CHECK LIST			
MEDIUM VOLTAGE CABLES			
EL-31 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrod Area 30 (Module-01)			
PROJECT NUMBER : 1251-100			
DISCIPLINE : Electrical		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : P1-CCTV-CRK-030-01		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION	RESULT	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, termination and joints of cables are correctly executed.	✓	
7	Inspect cables for jacket damage.	✓	
8	Ensure that the correct size and type of crimping lugs have been used.	✓	
9	Check that the bending radius of cables is not less than the minimum established.	✓	
10	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
11	Tie wraps to be used for cable and wires fixation.	✓	
REMARKS AND OBSERVATIONS:			
All cable trays must be installed.			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

PAGE 1 OF 1



**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

CABLE VOLTAGE LEVEL		
D.C TEST VOLTAGE		
MINIMUM INSULATION RESISTANCE (M.OHMS).		
3.3KV	2500V	200
6.6KV & Above	5000V	200

TABLE II

NOTES:

PRE-COMMISSIONING CHECK LIST			
MEDIUM VOLTAGE CABLES			
EL-31 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrod Area 30 (Module-01)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Electrical	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : P1-VD-TRK-030-01		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION	RESULT	OK/NA/PL
PL	ITEM No.		
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, termination and joints of cables are correctly executed.	✓	
7	Inspect cables for jacket damage.	✓	
8	Ensure that the correct size and type of crimping lugs have been used.	✓	
9	Check that the bending radius of cables is not less than the minimum established.	✓	
10	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
11	Tie wraps to be used for cable and wires fixation.	✓	
REMARKS AND OBSERVATIONS:			
All cables must be installed			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

PRE-COMMISSIONING CHECK LIST			
MEDIUM VOLTAGE CABLES			
EL-31 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrod Area 30 (Module-01)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Electrical	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : P1-VD-TRK-030-01		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION	RESULT	ITEM No.
12	Trench markers to be checked w.r.t approved documents.	N/A	
13	Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables.	✓	
14	Inspect cable laid in trenches, segregation and protection.	N/A	
15	Cables to be tested (continuity/insulation resistance).(*)	✓	
16	Equipment test report and inspection certificate to be checked.	✓	
17	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	✓	
18	Calibration test certificate of testing equipment to be checked.	✓	
REMARKS AND OBSERVATIONS :			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		Islam Sherif	
DATE			



PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A

INSULATION TEST
EL-31 A

CABLE VOLTAGE LEVEL	D.C TEST VOLTAGE	MINIMUM INSULATION RESISTANCE (M.OHMS).
3.3kV	2500V	200
6.6kV & Above	5000V	200

TABLE II

NOTES:

PRE-COMMISSIONING CHECK LIST			
MEDIUM VOLTAGE CABLES			
EL-31 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrod Area 30 (Module-01)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Electrical	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : P2-CCTV-CRK-030-01		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION	RESULT	ITEM No.
1	Construction punch list to be checked.	/	
2	Check cables are correctly fixed to trays and supports.	/	
3	Check cables through walls or ceilings are correctly sealed.	/	
4	Check that all cables are installed in accordance with cable lists and approved documents.	/	
5	Check identification tags of all conductors and wires.	/	
6	Check connection, termination and joints of cables are correctly executed.	/	
7	Inspect cables for jacket damage.	/	
8	Ensure that the correct size and type of crimping lugs have been used.	/	
9	Check that the bending radius of cables is not less than the minimum established.	/	
10	Cable markers to be installed before covering buried cables or cables in cable trays.	/	
11	Tie wraps to be used for cable and wires fixation.	/	
REMARKS AND OBSERVATIONS :			
All cables lugs must be installed			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

PRE-COMMISSIONING CHECK LIST			
MEDIUM VOLTAGE CABLES			
EL-31 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrod Area 30 (Module-01)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Electrical	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : P2-CCTV-CRK-030-01		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION	RESULT	ITEM No.
12	Trench markers to be checked w.r.t approved documents.	N/A	
13	Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables.	✓	
14	Inspect cable laid in trenches, segregation and protection.	N/A	
15	Cables to be tested (continuity/insulation resistance).(*)	✓	
16	Equipment test report and inspection certificate to be checked.	✓	
17	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	✓	
18	Calibration test certificate of testing equipment to be checked.	✓	
REMARKS AND OBSERVATIONS :			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

CABLE VOLTAGE LEVEL	D.C TEST VOLTAGE	MINIMUM INSULATION RESISTANCE (M.OHMS).
3.3KV	2500V	200
6.6KV & Above	5000V	200

TABLE II

NOTES:

PRE-COMMISSIONING CHECK LIST			
MEDIUM VOLTAGE CABLES			
EL-31 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrod Area 30 (Module-01)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Electrical	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : P2-VD-TRK-030-01		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION	RESULT	ITEM No.
1	Construction punch list to be checked.	/	
2	Check cables are correctly fixed to trays and supports.	/	
3	Check cables through walls or ceilings are correctly sealed.	/	
4	Check that all cables are installed in accordance with cable lists and approved documents.	/	
5	Check identification tags of all conductors and wires.	/	
6	Check connection, termination and joints of cables are correctly executed.	/	
7	Inspect cables for jacket damage.	/	
8	Ensure that the correct size and type of crimping lugs have been used.	/	
9	Check that the bending radius of cables is not less than the minimum established.	/	
10	Cable markers to be installed before covering buried cables or cables in cable trays.	/	
11	Tie wraps to be used for cable and wires fixation.	/	
REMARKS AND OBSERVATIONS :			
All cable trays must be installed			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		@ Islam Sherif	
DATE			

PRE-COMMISSIONING CHECK LIST			
MEDIUM VOLTAGE CABLES			
EL-31 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrod Area 30 (Module-01)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Electrical	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : P2-VD-TRK-030-01		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION	RESULT	ITEM No.
12	Trench markers to be checked w.r.t approved documents.	✓	
13	Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables.	✓	
14	Inspect cable laid in trenches, segregation and protection.	N/A	
15	Cables to be tested (continuity/insulation resistance).(*)	✓	
16	Equipment test report and inspection certificate to be checked.	✓	
17	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	✓	
18	Calibration test certificate of testing equipment to be checked.	✓	
REMARKS AND OBSERVATIONS :			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A

INSULATION TEST
EL-31 A

CABLE VOLTAGE LEVEL	D.C TEST VOLTAGE	MINIMUM INSULATION RESISTANCE (M.OHMS).
3.3kV	2500V	200
6.6kV & Above	5000V	200

TABLE II

NOTES:

PRE-COMMISSIONING CHECK LIST		MEDIUM VOLTAGE CABLES		EL-31 A	
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrod Area 30 (Module-01)					
PROJECT NUMBER : 1251-100		DISCIPLINE : Electrical			
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001			
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001			
ITEM TAG No. : P3-CCTV-CRK-030-01		AREA : 30			
REF. DWGS/DOCS :					
No.	DESCRIPTION	RESULT	OK/NA/PL	ITEM No.	
1	Construction punch list to be checked.	/			
2	Check cables are correctly fixed to trays and supports.	/			
3	Check cables through walls or ceilings are correctly sealed.	/			
4	Check that all cables are installed in accordance with cable lists and approved documents.	/			
5	Check identification tags of all conductors and wires.	/			
6	Check connection, termination and joints of cables are correctly executed.	/			
7	Inspect cables for jacket damage.	/			
8	Ensure that the correct size and type of crimping lugs have been used.	/			
9	Check that the bending radius of cables is not less than the minimum established.	/			
10	Cable markers to be installed before covering buried cables or cables in cable trays.	/			
11	Tie wraps to be used for cable and wires fixation.	/			
REMARKS AND OBSERVATIONS :					
All cables trays must be installed					
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.					
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER		
NAME					
SIGNATURE					
DATE					

PRE-COMMISSIONING CHECK LIST			
MEDIUM VOLTAGE CABLES			
EL-31 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Electrical	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : P3-CCTV-CRK-030-01		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION	RESULT	ITEM No.
12	Trench markers to be checked w.r.t approved documents.	N/A	
13	Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables.	—	
14	Inspect cable laid in trenches, segregation and protection.	N/A	
15	Cables to be tested (continuity/insulation resistance).(*)	✓	
16	Equipment test report and inspection certificate to be checked.	✓	
17	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	✓	
18	Calibration test certificate of testing equipment to be checked.	✓	
REMARKS AND OBSERVATIONS :			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

NOTES:

TABLE II

200	5000V	6.6kV & Above
200	2500V	3.3kV
MINIMUM INSULATION RESISTANCE (M.OHMS).	D.C TEST VOLTAGE	CABLE VOLTAGE LEVEL

EL-31 A
INSULATION TEST

PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A



PRE-COMMISSIONING CHECK LIST			
MEDIUM VOLTAGE CABLES			
EL-31 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrod Area 30 (Module-01)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Electrical	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : P3-VD-TRK-030-01		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION	RESULT	ITEM No.
1	Construction punch list to be checked.	/	
2	Check cables are correctly fixed to trays and supports.	/	
3	Check cables through walls or ceilings are correctly sealed.	/	
4	Check that all cables are installed in accordance with cable lists and approved documents.	/	
5	Check identification tags of all conductors and wires.	/	
6	Check connection, termination and joints of cables are correctly executed.	/	
7	Inspect cables for jacket damage.	/	
8	Ensure that the correct size and type of crimping lugs have been used.	/	
9	Check that the bending radius of cables is not less than the minimum established.	/	
10	Cable markers to be installed before covering buried cables or cables in cable trays.	/	
11	Tie wraps to be used for cable and wires fixation.	/	
REMARKS AND OBSERVATIONS :			
All cables tags must be installed.			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

PRE-COMMISSIONING CHECK LIST			
MEDIUM VOLTAGE CABLES			
EL-31 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Electrical	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : P3-VD-TRK-030-01		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION	RESULT	ITEM No.
12	Trench markers to be checked w.r.t approved documents.	N/A	
13	Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables.	✓	
14	Inspect cable laid in trenches, segregation and protection.	N/A	
15	Cables to be tested (continuity/insulation resistance).(*)	✓	
16	Equipment test report and inspection certificate to be checked.	✓	
17	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	✓	
18	Calibration test certificate of testing equipment to be checked.	✓	
REMARKS AND OBSERVATIONS :			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



PRE-COMMISSIONING CHECK LIST		
MEDIUM VOLTAGE CABLES		
EL-31 A		
INSULATION TEST		
EL-31 A		
CABLE VOLTAGE LEVEL	D.C TEST VOLTAGE	MINIMUM INSULATION RESISTANCE (M.OHMS).
3.3kV	2500V	200
6.6kV & Above	5000V	200
TABLE [1]		
NOTES:		

PRE-COMMISSIONING CHECK LIST			
TELECOMMUNICATION CABLES			
TE-07 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrod Area 30 (Module-01)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Telecommunication	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : VD-TEL-030-01		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION	RESULT	ITEM No.
1	All cables are terminated correctly as per the wiring Dwg and correctly fitted.	✓	
2	Carry out insulation resistance and continuity check.	✓	
3	Carry out Meggering check.	✓	
4	Cable tags are placed correctly (at both ends) and reflect the correct cable tag.	✓	
5	No Bending radius violation for the cables.	✓	
6	Check Earthing/grounding in accordance with specification.	✓	
7	Cable screen correctly connected to its corresponding earthing bar.	✓	
8	Check Cable type and model number as mentioned in the drawings/purchase order.	✓	
9	Glanding / Locknuts are correctly made.	✓	
10	Check that spare length exist at both ends of the cable.	✓	
11	Check cable installation conforms to drawings.	✓	
REMARKS AND OBSERVATIONS :			
All cable tags must be installed			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

PRE-COMMISSIONING CHECK LIST			
TELECOMMUNICATION CABLES			
TE-07 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Telecommunication	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : VD-TEL-030-01		AREA : 30	
REF. DWGS/DOCS :			
No.		DESCRIPTION	
RESULT		OK/NA/PL	
ITEM No.			
11	Confirm that all cables connected to equipment conform to cable schedule.	✓	
12	Check that all cables are correctly supported.		
REMARKS AND OBSERVATIONS :			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY		CONST. CONTRACTOR	
NAME		ENPPI	
SIGNATURE		CUSTOMER	
DATE			

PRE-COMMISSIONING CHECK LIST			
TELECOMMUNICATION CABLES			
TE-07 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Telecommunication	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : VD-TEL-030-02		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION	RESULT	ITEM No.
1	All cables are terminated correctly as per the wiring Dwg and correctly fitted.	✓	
2	Carry out insulation resistance and continuity check.	✓	
3	Carry out Meggering check.	✓	
4	Cable tags are placed correctly (at both ends) and reflect the correct cable tag.	✓	
5	No Bending radius violation for the cables.	✓	
6	Check Earthing/grounding in accordance with specification.	✓	
7	Cable screen correctly connected to its corresponding earthing bar.	✓	
8	Check Cable type and model number as mentioned in the drawings/purchase order.	✓	
9	Glanding / Locknuts are correctly made.	✓	
10	Check that spare length exist at both ends of the cable.	✓	
11	Check cable installation conforms to drawings.	✓	
REMARKS AND OBSERVATIONS :			
<p style="font-size: 1.2em; color: blue;">All Cables Tags must be installed</p>			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

PRE-COMMISSIONING CHECK LIST			
TELECOMMUNICATION CABLES			
TE-07 A			
PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)			
PROJECT NUMBER : 1251-100		DISCIPLINE : Telecommunication	
SYSTEM NAME : Integrated Voice & Data System		SYSTEM ID : 030-TE-001	
SUB-SYSTEM NAME : Integrated Voice & Data System		SUB-SYSTEM ID : 030-TE-001	
ITEM TAG No. : VD-TEL-030-02		AREA : 30	
REF. DWGS/DOCS :			
No.	DESCRIPTION		OK/NA/PL
			RESULT
			ITEM No.
11	Confirm that all cables connected to equipment conform to cable schedule.		
12	Check that all cables are correctly supported.		
REMARKS AND OBSERVATIONS :			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

12.11- Electrical Supplier Check Lists & Reports

System ID	System Description
030-TE-001	Integrated Voice & Data System

13- Electrical Commissioning



System ID	System Description
030-TE-001	Integrated Voice & Data System



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)




13.01- Electrical -Commissioning Check Lists

<div><div><div><div>Enppi</div><div>پتروپي</div><div>PETROJET</div></div></div><div><div>Project: 01251-100</div><div>CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div><div></div></div></div>		System ID	030-TE-001
		System Description	Integrated Voice & Data System


13.02- Electrical Supplier Check Lists & Reports

System ID	030-TE-001
System Description	Integrated Voice & Data System







Enppi
PETROJET

Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)




14- Red Marked-up Drawings

System ID		030-TE-001
System Description		Integrated Voice & Data System
<div><div><div>Enppi</div><div>پتروپي</div></div><div><div>Project: 01251-100</div><div>CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div><div><div>پتروکیم خای-بینکا</div><div>Petrochem Khay-Binca Company</div></div></div></div>		

<div>  <div> <div> Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA) </div> <div>  </div> </div> </div>	<div> <div>System ID</div> <div>030-TE-001</div> </div>	<div> <div>System Description</div> <div>Integrated Voice & Data System</div> </div>
		<div> <div>14.01- P&ID</div> </div>

14.02- Instrumentation Drawings


System ID	030-TE-001
System Description	Integrated Voice & Data System



Enppi



Project: 01251-100

CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



پترو جت

14.03- Electrical Drawings

System ID		030-TE-001
System Description		Integrated Voice & Data System
<div><div><div>Enppi PETROJET</div></div><div>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div><div></div></div>		